

=> fil reg; d ide l2; d ide l3
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* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

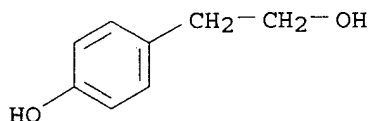
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L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN
RN 501-94-0 REGISTRY
ED Entered STN: 16 Nov 1984
CN Benzeneethanol, 4-hydroxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Phenethyl alcohol, p-hydroxy- (7CI, 8CI)
CN Tyrosol (6CI)
OTHER NAMES:
CN β -(4-Hydroxyphenyl)ethanol
CN β -(p-Hydroxyphenyl)ethanol
CN 2-(4-Hydroxyphenyl)ethanol
CN 2-(4-Hydroxyphenyl)ethyl alcohol
CN 2-(p-Hydroxyphenyl)ethanol
CN 4-(2-Hydroxyethyl)phenol
CN 4-Hydroxybenzeneethanol
CN 4-Hydroxyphenethyl alcohol
CN NSC 59876
CN p-(2-Hydroxyethyl)phenol
CN p-HPEA
CN p-Hydroxyphenethyl alcohol

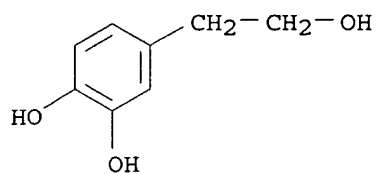
CN p-Tyrosol
CN Tyrosol C
FS 3D CONCORD
MF C8 H10 O2
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, CSNB, DDFU, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, NAPRALERT, NIOSHTIC, PROMT, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1286 REFERENCES IN FILE CA (1907 TO DATE)
48 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1296 REFERENCES IN FILE CAPLUS (1907 TO DATE)
33 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN
RN 10597-60-1 REGISTRY
ED Entered STN: 16 Nov 1984
CN 1,2-Benzenediol, 4-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Phenethyl alcohol, 3,4-dihydroxy- (6CI, 7CI, 8CI)
OTHER NAMES:
CN β-(3,4-Dihydroxyphenyl)ethanol
CN β-(3,4-Dihydroxyphenyl)ethyl alcohol
CN 1-(2-Hydroxyethyl)-3,4-dihydroxybenzene
CN 2-(3,4-Dihydroxyphenyl)ethanol
CN 2-(3,4-Dihydroxyphenyl)ethyl alcohol
CN 3,4-DHPEA
CN 3,4-Dihydroxy-β-phenethyl alcohol
CN 3,4-Dihydroxyphenethyl alcohol
CN 3,4-Dihydroxyphenylethanol
CN 3,4-Dihydroxyphenylethyl alcohol
CN 3-Hydroxytyrosol
CN 4-(2-Hydroxymethyl)-1,2-benzenediol
CN Ba 2774
CN Homoprotocatechuy alcohol
CN **Hydroxytyrosol**
FS 3D CONCORD
MF C8 H10 O3
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CIN, CSCHEM, DDFU, DRUGU, EMBASE, IPA, MEDLINE, NAPRALERT, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)



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692 REFERENCES IN FILE CA (1907 TO DATE)
17 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
698 REFERENCES IN FILE CAPLUS (1907 TO DATE)
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> =>

=> fil capl; d que l1; d que l19
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FILE COVERS 1907 - 27 Mar 2006 VOL 144 ISS 14
FILE LAST UPDATED: 26 Mar 2006 (20060326/ED)

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'OBI' IS DEFAULT SEARCH FIELD FOR 'CAPLUS' FILE

*inventor
search*

L1 1 SEA FILE=CAPLUS ABB=ON US2004-801511/AP

L2 1 SEA FILE=REGISTRY ABB=ON TYROSOL/CN
L3 1 SEA FILE=REGISTRY ABB=ON HYDROXYTYROSOL/CN
L4 1296 SEA FILE=CAPLUS ABB=ON L2
L5 698 SEA FILE=CAPLUS ABB=ON L3
L6 2 SEA FILE=CAPLUS ABB=ON BALLESTEROS PERDICES M?/AU
L7 3 SEA FILE=CAPLUS ABB=ON PERDICES M?/AU
L8 128 SEA FILE=CAPLUS ABB=ON BALLESTEROS M?/AU
L9 1569 SEA FILE=CAPLUS ABB=ON ALVAREZ M?/AU OR NEGRO ALVAREZ M?/AU
OR NEGRO M?/AU
L10 69 SEA FILE=CAPLUS ABB=ON MANZANARES SECADES P?/AU OR SECADES
P?/AU OR MANZANARES P?/AU
L11 29 SEA FILE=CAPLUS ABB=ON BALLESTEROS I?/AU OR BALLESTEROS
PERDICES I?/AU OR PERDICES I?/AU
L13 12341 SEA FILE=CAPLUS ABB=ON OLIVE OIL/CT
L14 65522 SEA FILE=CAPLUS ABB=ON PHENOLS/CT
L19 11 SEA FILE=CAPLUS ABB=ON (L6 OR L7 OR L8 OR L9 OR L10 OR L11)
AND (L13 OR L14 OR (L4 OR L5))

=> s l1 or l19

L89 11 L1 OR L19

=> fil wpids; d que l72; d que l73

FILE 'WPIDS' ENTERED AT 14:59:10 ON 27 MAR 2006
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FILE LAST UPDATED: 23 MAR 2006 <20060323/UP>
 MOST RECENT DERWENT UPDATE: 200620 <200620/DW>
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http://www.stn-international.de/stndatabases/details/ipc_reform.html and
<http://scientific.thomson.com/media/scpdf/ipcrdwpi.pdf> <<<

L60 2 SEA FILE=WPIDS ABB=ON MANZANARES SECADES P?/AU OR SECADES
 P?/AU OR MANZANARES P?/AU
 L61 102 SEA FILE=WPIDS ABB=ON ALVAREZ M?/AU OR NEGRO ALVAREZ M?/AU OR
 NEGRO M?/AU
 L62 2 SEA FILE=WPIDS ABB=ON BALLESTEROS M?/AU OR BALLESTEROS
 PERDICES M?/AU OR PERDICES M
 L63 2 SEA FILE=WPIDS ABB=ON BALLESTEROS I?/AU OR BALLESTEROS
 PERDICES I?/AU OR PERDICES I
 L72 1 SEA FILE=WPIDS ABB=ON L61 AND (L60 OR (L62 OR L63))

L60 2 SEA FILE=WPIDS ABB=ON MANZANARES SECADES P?/AU OR SECADES
 P?/AU OR MANZANARES P?/AU
 L61 102 SEA FILE=WPIDS ABB=ON ALVAREZ M?/AU OR NEGRO ALVAREZ M?/AU OR
 NEGRO M?/AU
 L62 2 SEA FILE=WPIDS ABB=ON BALLESTEROS M?/AU OR BALLESTEROS
 PERDICES M?/AU OR PERDICES M
 L63 2 SEA FILE=WPIDS ABB=ON BALLESTEROS I?/AU OR BALLESTEROS
 PERDICES I?/AU OR PERDICES I
 L68 99288 SEA FILE=WPIDS ABB=ON PHENOL#
 L69 58 SEA FILE=WPIDS ABB=ON TYROSOL# OR HYDROXYTYROSOL#
 L73 2 SEA FILE=WPIDS ABB=ON (L60 OR L61 OR L62 OR L63) AND (L68 OR
 L69)

=> s 172-173

L90 2 (L72 OR L73)

=> fil JICST-EPLUS, AGRICOLA, PASCAL, FROSTI, CABA, BIOTECHNO, BIOSIS, BIOTECHDS, FSTA, CONFSCI, CEABA-VTB, SCISEARCH

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=> d que 144; d que 145

L2 1 SEA FILE=REGISTRY ABB=ON TYROSOL/CN
L3 1 SEA FILE=REGISTRY ABB=ON HYDROXYTYROSOL/CN
L29 120 SEA BALLESTEROS I?/AU OR BALLESTEROS PERDICES I?/AU OR
PERDICES I?/AU
L30 701 SEA BALLESTEROS M?/AU OR BALLESTEROS PERDICES M?/AU OR
PERDICES M?/AU
L31 7027 SEA ALVAREZ M?/AU OR NEGRO ALVAREZ M?/AU OR NEGRO M?/AU
L32 327 SEA MANZANARES SECADES P?/AU OR SECADES P?/AU OR MANZANARES
P?/AU
L33 71147 SEA OLIVE#
L34 274560 SEA PHENOL#
L35 2028 SEA TYROSOL# OR HYDROXYTYROSOL#
L36 30229 SEA AUTOCLAV?
L37 71654 SEA HYDROTHERMAL? OR HYDRO THERMAL?
L38 1320943 SEA RESIDU?
L39 625929 SEA WASTE#

L40 306 SEA L2
 L41 223 SEA L3
 L42 27 SEA (L29 OR L30 OR L31 OR L32) AND ((L34 OR L35) OR (L40 OR L41))
 L44 9 SEA L42 AND ((L36 OR L37 OR L38 OR L39) OR L33)

L2 1 SEA FILE=REGISTRY ABB=ON TYROSOL/CN
 L3 1 SEA FILE=REGISTRY ABB=ON HYDROXYTYROSOL/CN
 L29 120 SEA BALLESTEROS I?/AU OR BALLESTEROS PERDICES I?/AU OR PERDICES I?/AU
 L30 701 SEA BALLESTEROS M?/AU OR BALLESTEROS PERDICES M?/AU OR PERDICES M?/AU
 L31 7027 SEA ALVAREZ M?/AU OR NEGRO ALVAREZ M?/AU OR NEGRO M?/AU
 L32 327 SEA MANZANARES SECADES P?/AU OR SECADES P?/AU OR MANZANARES P?/AU
 L34 274560 SEA PHENOL#
 L35 2028 SEA TYROSOL# OR HYDROXYTYROSOL#
 L40 306 SEA L2
 L41 223 SEA L3
 L45 6 SEA L29 AND L30 AND L31 AND L32 AND ((L34 OR L35) OR (L40 OR L41))

=> s 144-145

L91 9 (L44 OR L45)

=> dup rem 189,191,190

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PROCESSING COMPLETED FOR L89
 PROCESSING COMPLETED FOR L91
 PROCESSING COMPLETED FOR L90
 L92 14 DUP REM L89 L91 L90 (8 DUPLICATES REMOVED)
 ANSWERS '1-11' FROM FILE CAPLUS
 ANSWER '12' FROM FILE FROSTI
 ANSWER '13' FROM FILE FSTA
 ANSWER '14' FROM FILE WPIDS

=> d ibib ed abs hitind 1-11; d iall 12-14

L92 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1
 ACCESSION NUMBER: 2004:80555 CAPLUS
 DOCUMENT NUMBER: 140:130123
 TITLE: Recovery of phenolic compounds from a residual plant material by using a hydrothermal process
 INVENTOR(S): Ballesteros Perdices, Mercedes; Negro Alvarez, Maria Jose; Manzanares Secades, Paloma; Ballesteros Perdices, Ignacio; Oliva Dominguez, Jose Miguel
 PATENT ASSIGNEE(S): Centro De Investigaciones Energeticas, Medioambientales Y Tecnologicas (C.I.E.M.A.T.), Spain
 SOURCE: PCT Int. Appl., 18 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Spanish
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004009206	A1	20040129	WO 2003-ES85	20030220
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
ES 2199069	A1	20040201	ES 2002-1671	20020717
ES 2199069	B1	20050201		
AU 2003208731	A1	20040209	AU 2003-208731	20030220
US 2004176647	A1	20040909	US 2004-801511	20040316 <--
PRIORITY APPLN. INFO.:			ES 2002-1671	A 20020717
			WO 2003-ES85	W 20030220

ED Entered STN: 01 Feb 2004

AB The method involves a hydrothermal processing of a residual plant material (especially waste from olive oil production) in a closed reactor (especially stirred

autoclave). The process contains the following steps: (a) contacting of the raw material with hot water at a solid/liquid weight ratio of 1:(5-15) in the reactor, (b) stirring of the mixture, (c) heating to a temperature range of 180-240° and at such a pressure that the water remains in the liquid phase, (d) stirring for 4-30 min, and (e) cooling of the reactor to apprx.40°, unloading of the mixture and recovery of the liquid fraction. Content of tyrosol and hydroxytyrosol is determined by using high-pressure liquid chromatog. The recovered phenolic compds. are suitable

as antioxidants for food and pharmaceutical industries.

IC ICM B01D012-00
ICS C07C039-08; C07C039-11; C07C039-10

CC 45-4 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
Section cross-reference(s): 17, 63

IT **Olive oil**
RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PYP (Physical process); PREP (Preparation); PROC (Process)
(recovery of phenolic compds. from olive oil manufacturing waste by using hydrothermal process)

IT **Phenols, preparation**
RL: PUR (Purification or recovery); PREP (Preparation)
(recovery of phenolic compds. from olive oil manufacturing waste by using hydrothermal process)

IT **501-94-0P, Tyrosol 10597-60-1P, Hydroxytyrosol**
RL: PUR (Purification or recovery); PREP (Preparation)
(recovery of phenolic compds. from olive oil manufacturing waste by using hydrothermal process)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L92 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 2

ACCESSION NUMBER: 2002:323662 CAPLUS

DOCUMENT NUMBER: 137:46155

TITLE: Ethanol production from olive oil extraction residue pretreated with hot water

AUTHOR(S): Ballesteros, Ignacio; Oliva, Jose Miguel; Negro, Maria Jose; Manzanares, Paloma; Ballesteros, Mercedes

CORPORATE SOURCE: Centro De Investigaciones Energeticas Medioambientales Y Tecnologicas, (CIEMAT), Renewable Energies Department, Madrid, 28040, Spain

SOURCE: Applied Biochemistry and Biotechnology (2002), 98-100(Biotechnology for Fuels and Chemicals), 717-732
CODEN: ABIBDL; ISSN: 0273-2289

PUBLISHER: Humana Press Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 01 May 2002

AB The olive pulp fraction contained in the residue generated in olive oil extraction by a two-step centrifugation process can be upgraded by using the cellulose fraction to produce ethanol and recovering high value phenols (tyrosol and hydroxytyrosol). Olive pulp was pretreated in a laboratory scale stirred autoclave at different temps. (150-250°C). Pretreatment was evaluated regarding cellulose recovery, enzymic hydrolysis effectiveness, ethanol production by a simultaneous saccharification and fermentation process (SSF), and phenols recovery in the filtrate. The pretreatment of olive pulp using water at temps. between 200°C and 250°C enhanced enzymic hydrolysis. Maximum ethanol production (11.9 g/L) was obtained after pretreating pulp at 210°C in a SSF fed-batch procedure. Maximum hydroxytyrosol recovery was obtained in the liquid fraction when pretreated at 230°C.

CC 16-5 (Fermentation and Bioindustrial Chemistry)

IT **501-94-0P, Tyrosol 10597-60-1P**
RL: BYP (Byproduct); PUR (Purification or recovery); PREP (Preparation)
(ethanol production from olive oil extraction residue pretreated with hot water)

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

Applicant

L92 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 3

ACCESSION NUMBER: 1995:961971 CAPLUS
 DOCUMENT NUMBER: 124:36554
 TITLE: Production of ligninolytic activities when treating paper pulp effluents by *Trametes versicolor*
 AUTHOR(S): Manzanares, P.; Fajardo, S.; Martin, C.
 CORPORATE SOURCE: Instituto de Energias Renovables, CIEMAT, Avda. Complutense, 22, Madrid, 28040, Spain
 SOURCE: Journal of Biotechnology (1995), 43(2), 125-32
 CODEN: JBITD4; ISSN: 0168-1656
 PUBLISHER: Elsevier
 DOCUMENT TYPE: Journal
 LANGUAGE: English

ED Entered STN: 05 Dec 1995

AB The ability of *Trametes versicolor* to decolorize effluent from alkaline cooking of cereal straw produced at a paper and paper pulp making plant was studied. Enzymic activities related to the metabolism of lignin during fungal treatment were also evaluated. Results showed the necessity of a C source for progress of the decolorization process, which can reach color elimination values >70%. The study of enzymic activities showed the production (starting from the first hours of treatment) of laccase activity much higher than that obtained under the same conditions in synthetic growth media. There was also a clear relationship between the effluent concentration in the medium and laccase activity. In decolorization media, Mn-dependent peroxidase activity was also detected, when MnSO₄ was added to those media. No lignin peroxidase (LiP) activity was detected in the conditions assayed.

CC 60-1 (Waste Treatment and Disposal)
 Section cross-reference(s): 10, 43

IT Phenols, processes

RL: REM (Removal or disposal); PROC (Process)
 (removal in in decolorization treatment of paper and pulp manufacturing effluents by *Trametes versicolor*)

L92 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:982251 CAPLUS
 DOCUMENT NUMBER: 143:268286
 TITLE: Production of ortho- and para-substituted aromatic azo compounds and other azo compounds
 INVENTOR(S): Subramanian, Lakshminarayanapuram Ramaswami;
 Alvarez, Mico Xavier; Ziegler, Thomas
 PATENT ASSIGNEE(S): Universitaet Tuebingen, Germany
 SOURCE: Ger. Offen., 18 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 102004005316	A1	20050908	DE 2004-102004005316	20040204
PRIORITY APPLN. INFO.:			DE 2004-102004005316	20040204
OTHER SOURCE(S):	MARPAT 143:268286			

ED Entered STN: 09 Sep 2005

AB The title compds., useful in dyes, are prepared by nucleophilic coupling of 1,2,3-triazoles of specified structure. Stirring 1 part benzotriazole in 1 part glyme with an equimolar amount of BuLi for 1 h at 0°, adding 1.5 parts nonafluorobutanesulfonyl fluoride dropwise, and refluxing for 3 h gave 89% 1-[(nonafluorobutane)sulfonyl]triazole (I). Stirring NaH 3,

phenol 3, and I 2.5 equivalent in PhMe at room temperature for 7 h gave 76% 2-[(2-hydroxyphenyl)azo]-1-[(nonafluorobutane)sulfonyl]benzene.

IC ICM C07D249-00

ICS C07D249-18; C09B043-24; C09B043-11

CC 41-3 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)

IT **Phenols, reactions**

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of phenols with [(nonafluorobutyl)sulfonyl]benzotriazole)

L92 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:565014 CAPLUS

DOCUMENT NUMBER: 143:78258

TITLE: Tuning the anionic cyclization-protonation of N-benzyl(diphenyl)-phosphinamides. Highly efficient synthesis of tetrahydrobenzo-1-aza-2λ5-phospholes containing a 1,3-cyclohexadiene system

AUTHOR(S): Fernandez, Ignacio; Gomez, Gloria Ruiz; Iglesias, Maria Jose; Ortiz, Fernando Lopez; Alvarez-Manzaneda, Ramon

CORPORATE SOURCE: Area de Quimica Organica, Universidad de Almeria, Almeria, 04120, Spain

SOURCE: ARKIVOC (Gainesville, FL, United States) (2005), (9), 375-393

CODEN: AGFUAR

URL: http://www.arkat-usa.org/ark/journal/2005/I09_Molina-Elguero/1531/ME-1531H.pdf

PUBLISHER: Arkat USA Inc.

DOCUMENT TYPE: Journal; (online computer file)

LANGUAGE: English

OTHER SOURCE(S): CASREACT 143:78258

ED Entered STN: 30 Jun 2005

AB A study of dearomatization of N-alkyl-N-benzyl-diphenylphosphinamides through anionic cyclization followed by protonation with a wide range of protonating reagents has been carried out. The proton sources used include alcs., phenols, amines, amides, and organic acids. The effect of the N-alkyl substituent, the acidity, and the size of the protonating reagent were analyzed. The mixts. of products formed were derived predominantly from α- and γ-protonation with respect to the phosphorus. Addition of tert-butyldimethylsilyl chloride to the reaction medium prior to the protonation with methanol allowed the preparation of tetrahydrobenzo-[c]-1-aza-2λ5-phospholes containing a 1,3-cyclohexadiene with a cis-fusion of the rings in very high yields.

CC 29-7 (Organometallic and Organometalloidal Compounds)

IT Alcohols, reactions

Amides, reactions

Amines, reactions

Phenols, reactions

RL: RGT (Reagent); RACT (Reactant or reagent)

(proton source; highly efficient synthesis of

tetrahydrobenzoazaphospholes containing cyclohexadiene system via anionic cyclization-protonation of benzyl(diphenyl)phosphinamides)

REFERENCE COUNT: 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L92 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:615302 CAPLUS

DOCUMENT NUMBER: 141:346390

TITLE: In vitro effects of the polyphenols resveratrol, mangiferin and (-)-epigallocatechin-3-gallate on the

scuticociliate fish pathogen *Philasterides dicentrarchi*
AUTHOR(S): Leiro, J.; Arranz, J. A.; Parama, A.; Alvarez, M. F.; Sanmartin, M. L.
CORPORATE SOURCE: Laboratorio de Parasitologia, Instituto de Investigacion y Analisis Alimentarios, Universidad de Santiago de Compostela, Santiago de Compostela, 15782, Spain
SOURCE: Diseases of Aquatic Organisms (2004), 59(2), 171-174
CODEN: DAOREO; ISSN: 0177-5103
PUBLISHER: Inter-Research
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 02 Aug 2004
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB This study investigated the in vitro effects of the polyphenols resveratrol (I), mangiferin (II) and (-)-epigallocatechin-3-gallate (III) on the histiophagous ciliate *Philasterides dicentrarchi*, which causes fatal scuticociliatosis in farmed turbot *Scophthalmus maximus* L. Of the 3 polyphenols, I showed strongest antiprotozoal activity, reducing ciliate d. after 1 wk culture by, on average, 91% at 50 μ M, and 96% at 500 μ M. III reduced ciliate d. by, on average, 93% at 500 μ M, with no significant effect at 50 μ M. II reduced ciliate d. by, on average, 56% at 500 μ M, again with no significant effect at 50 μ M. In view of these findings, we discuss the potential utility of chemotherapy with polyphenols as a strategy for the control of scuticociliatosis in farmed turbot.

CC 10-5 (Microbial, Algal, and Fungal Biochemistry)

Section cross-reference(s): 5

IT Phenols, biological studies

RL: AGR (Agricultural use); FFD (Food or feed use); PAC (Pharmacological activity); BIOL (Biological study); USES (Uses)
(polyphenols, nonpolymeric; in vitro antiprotozoal activity of the polyphenols resveratrol, mangiferin and epigallocatechin gallate on the scuticociliate fish pathogen *Philasterides dicentrarchi*)

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L92 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:187134 CAPLUS

DOCUMENT NUMBER: 138:236989

TITLE: Simultaneous saccharification and fermentation process for converting the cellulosic fraction of olive oil extraction residue into ethanol

AUTHOR(S): Ballesteros, I.; Oliva, J. M.; Negro, M. J.; Manzanares, P.; Ballesteros, M.

CORPORATE SOURCE: Dept. de Energias Renovables, CIEMAT, Madrid, 28040, Spain

SOURCE: Grasas y Aceites (Sevilla, Spain) (2002), 53(3), 282-288

CODEN: GRACAN; ISSN: 0017-3495

PUBLISHER: Instituto de la Grasa

DOCUMENT TYPE: Journal

LANGUAGE: Spanish

ED Entered STN: 11 Mar 2003

AB In this work, the residue generated in the new two-step centrifugation process for olive oil extraction is assessed for the production of bioethanol. Both olive pulp and fragmented stones fractions comprised in such residue are analyzed and tested at laboratory scale for bioconversion to ethanol by a simultaneous saccharification and fermentation (SSF) process. Firstly, optimal conditions for the enzymic hydrolysis step of steam-exploded pretreated substrates were determined. Then, simultaneous saccharification and fermentation

process was assayed using the thermotolerant yeast *Kluyveromyces marxianus* in different assay conditions. For the selected conditions, 9 kg of unpretreated pulp or 6 kg of pretreated fragmented stones (both based on dry matter) would be necessary to obtain 1 L of ethanol.

CC 16-5 (Fermentation and Bioindustrial Chemistry)

IT Olive oil

RL: MSC (Miscellaneous)

(simultaneous saccharification and fermentation process for converting cellulosic fraction of olive oil extraction residue into ethanol)

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L92 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:62075 CAPLUS

DOCUMENT NUMBER: 138:353184

TITLE: The effects of fish oil, olive oil, oleic acid and linoleic acid on colorectal neoplastic processes

AUTHOR(S): Llor, X.; Pons, E.; Roca, A.; Alvarez, M.; Mane, J.; Fernandez-Banares, F.; Gassull, M. A.

CORPORATE SOURCE: Hospital Universitari Germans Trias i Pujol, Department of Gastroenterology, Universitat Autonoma de Barcelona, Badalona, Barcelona, 08916, Spain

SOURCE: Clinical Nutrition (2002), Volume Date 2003, 22(1), 71-79

CODEN: CLNUDP; ISSN: 0261-5614

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 27 Jan 2003

AB Background and Aims: Several nutrients play a significant role in colorectal cancer development, and fats could be among the most determinant. While several studies have shown that the n-3 fatty acids eicosapentaenoic and docosahexaenoic and its main dietary source, fish oil could exert important antineoplastic effects, much less is known about the effects of olive oil and its main fatty acid, oleic acid, and linoleic acid. The aim of these studies is to assess the role of these nutrients in crucial processes involved in colorectal carcinogenesis. Methods: Caco-2 and HT-29 colorectal cancer cells were supplemented with different fats and their role in apoptosis induction, cell proliferation, and differentiation was studied. COX-2 and Bcl-2 expressions were also assessed. Results: Supplementation with fish oil or olive oil results in an induction of apoptosis and cell differentiation. The latest effect was also induced by oleic and linoleic acid. Fish oil diminishes significantly cell proliferation. Supplementation with fish oil and olive oil results in an early downregulation of COX-2 followed by a decrease in Bcl-2 expression. Conclusions: Fish oil and olive oil are capable of influencing crucial processes responsible for colorectal cancer development. COX-2 and Bcl-2 may be important mediators of some of these effects.

CC 18-5 (Animal Nutrition)

IT Olive oil

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(effects of fish oil, olive oil, oleic acid and linoleic acid on
colorectal neoplastic processes)

REFERENCE COUNT: 65 THERE ARE 65 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L92 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:409146 CAPLUS

DOCUMENT NUMBER: 135:124478

TITLE: Chemical and physical activation of olive-mill waste
water to produce activated carbons

AUTHOR(S): Moreno-Castilla, C.; Carrasco-Marin, F.; Lopez-Ramon,
M. V.; **Alvarez-Merino, M. A.**

CORPORATE SOURCE: Facultad de Ciencias, Departamento de Quimica
Inorganica, Universidad de Granada, Granada, 18071,
Spain

SOURCE: Carbon (2001), 39(9), 1415-1420

CODEN: CRBNAH; ISSN: 0008-6223

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 07 Jun 2001

AB Olive-mill waste water is produced in large quantities during the manufacture
process of the olive oil in mills. This byproduct has been used as raw
material to produce activated carbons by both chemical and phys. activation
methods. In the first case, KOH and H3PO4 were used as activating agent,
and in the second case, CO2 at 840°C for different periods of time.
Results obtained indicate that the chemical activation with KOH at
800°C, in an inert atmospheric, yielded activated carbons with the highest
surface area and more developed micro, meso and macroporosity:

CC 49-1 (Industrial Inorganic Chemicals)

IT Olive oil

RL: PNU (Preparation, unclassified); PREP (Preparation)
(chemical and phys. activation of olive-mill waste water to produce
activated carbons)

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L92 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:344115 CAPLUS

DOCUMENT NUMBER: 134:352334

TITLE: Ethanol production from lignocellulosic byproducts of
olive oil extraction

AUTHOR(S): **Ballesteros, Ignacio**; Oliva, Jose Miguel;
Saez, Felicia; **Ballesteros, Mercedes**

CORPORATE SOURCE: Renewable Energies Department, CIEMAT, Madrid, 28040,
Spain

SOURCE: Applied Biochemistry and Biotechnology (2001),
91-93 (Symposium on Biotechnology for Fuels and
Chemicals, 2000), 237-252

CODEN: ABIBDL; ISSN: 0273-2289

PUBLISHER: Humana Press Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 14 May 2001

AB The recent implementation of a new two-step centrifugation process for
extracting olive oil in Spain has substantially reduced water consumption,
thereby eliminating oil mill wastewater. However, a new high sugar
content residue is still generated. In this work the two fractions
present in the residue (olive pulp and fragmented stones) were assayed as

substrate for ethanol production by the simultaneous saccharification and fermentation (SSF) process. Pretreatment of fragmented olive stones by sulfuric

acid-catalyzed steam explosion was the most effective treatment for increasing enzymic digestibility; however, a pretreatment step was not necessary to bioconvert the olive pulp into ethanol. The olive pulp and fragmented olive stones were tested by the SSF process using a fed-batch procedure. By adding the pulp three times at 24-h intervals, 76% of the theor. SSF yield was obtained. *Expts. with fed-batch pretreated olive stones provided SSF yields significantly lower than those obtained at standard SSF procedure. The preferred SSF conditions to obtain ethanol from olive stones (61% of theor. yield) were 10% substrate and addition of cellulases at 15 filter paper units/g of substrate.

CC 16-5 (Fermentation and Bioindustrial Chemistry)

IT Olive oil

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(ethanol production from lignocellulosic byproducts of olive oil extraction)

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L92 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:118870 CAPLUS

DOCUMENT NUMBER: 132:321368

TITLE: Effect of olive oil on early and late events of colon carcinogenesis in rats. Modulation of arachidonic acid metabolism and local prostaglandin E2 synthesis

AUTHOR(S): Bartoli, R.; Fernandez-Banares, F.; Navarro, E.; Castella, E.; Mane, J.; Alvarez, M.; Pastor, C.; Cabre, E.; Gassull, M. A.

CORPORATE SOURCE: Department of Gastroenterology, Hospital Universitari Germans Trias i Pujol, Badalona, 08916, Spain

SOURCE: Gut (2000), 46(2), 191-199
CODEN: GUTTAK; ISSN: 0017-5749

PUBLISHER: BMJ Publishing Group

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 21 Feb 2000

AB Animal model studies have shown that the colon tumor promoting effect of dietary fat depends not only on the amount but on its fatty acid composition. With respect to this, the effect of n9 fatty acids, present in olive oil, on colon carcinogenesis was scarcely investigated. The effect of an n9 fat diet was assessed on precancer events, carcinoma development, and changes in mucosal fatty acid composition and prostaglandin (PG)E2 formation in male rats with azoxymethane induced colon cancer. Rats were divided into 3 groups to receive isocaloric diets (5% of the energy as fat) rich in n9, n3, or n6 fat, and were administered azoxymethane s.c. once a week for 11 wk at a dose rate of 7.4 mg/kg body weight. Vehicle treated groups received an equal volume of normal saline. Groups of animals were colectomized at weeks 12 and 19 after the 1st dose of azoxymethane or saline. Mucosal fatty acids were assessed at 12 and 19 wk. Aberrant crypt foci and the in vivo intracolonic release of PGE2 were assessed at week 12, and tumor formation at week 19. Rats on the n6 diet were found to have colonic aberrant crypt foci and adenocarcinomas more often than those consuming either the n9 or n3 diet. There were no differences between the rats on the n9 and n3 diets. On the other hand, administration of both n9 and n3 diets was associated with a decrease in mucosal arachidonate concns. as compared with the n6 diet. Carcinogen treatment induced an appreciable increase in PGE2 formation in rats fed the n6 diet, but not in those fed the n3 and n9 diets. Thus, dietary olive oil prevented the development of aberrant crypt foci and colon carcinomas in rats, suggesting that olive

oil may have chemopreventive activity against colon carcinogenesis. These effects may be partly due to modulation of arachidonic acid metabolism and local PGE2 synthesis.

CC 18-5 (Animal Nutrition)

Section cross-reference(s): 14

IT Olive oil

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(olive oil effect on arachidonic acid metabolism and prostaglandin E2 synthesis in colon carcinogenesis)

REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L92 ANSWER 12 OF 14 FROSTI COPYRIGHT 2006 LFRA on STN

ACCESSION NUMBER: 634607 FROSTI

TITLE: Method of extracting phenolic compounds from a residual plant material using a hydrothermal process.

INVENTOR: Ballesteros Percides M.; Negro Alvarez M.J.; Manzanares Secades P.; Ballesteros Perdices I.; Oliva Dominguez J.M.

PATENT ASSIGNEE: Centro de Investigaciones Energeticas; Medioambientales y Tecnologicas (C.I.E.M.A.T.);

SOURCE: PCT Patent Application

PATENT INFORMATION: WO 2004009206 A1

APPLICATION INFORMATION: 20030220

PRIORITY INFORMATION: Spain 20020717

DOCUMENT TYPE: Patent

LANGUAGE: Spanish

SUMMARY LANGUAGE: Spanish

ABSTRACT: A method of extracting phenolic compounds from olive oil-processing residues using a hydrothermal process is described. The residues are treated with water in a closed reactor at a solid to liquid ratio of between 1 to 5 and 1 to 15. The mixture is stirred and heated at between 180 and 240 C for between 4 and 30 minutes, then cooled to 40 C. Phenolic compounds such as tyrosol and hydroxytyrosol may be obtained from the liquid fraction for use as antioxidants in food and pharmaceutical products.

SUBJECT HEADING: ADDITIVES

CONTROLLED TERM: ANTIOXIDANTS; EXTRACTION; FATS; HYDROTHERMAL PROCESSING; HYDROXYTYROSOL; OLIVE WASTE; PATENT; PCT PATENT; PHENOLIC COMPOUNDS; PROCESSING; PRODUCTION; TYROSOL; WASTE

DATA ENTRY DATE: 2 Apr 2004

L92 ANSWER 13 OF 14 FSTA COPYRIGHT 2006 IFIS on STN

ACCESSION NUMBER: 2003:B0685 FSTA

TITLE: Ethanol production from olive oil extraction residue pretreated with hot water.

AUTHOR: Ballesteros, I.; Oliva, J. M.; Negro, M. J.; Manzanares, P.; Ballesteros, M.

CORPORATE SOURCE: Correspondence (Reprint) address, M. Ballesteros,

Applicant/Not good date

Applicant/Not good date

Renewable Energies Dep., Cent. de Investigaciones Energeticas Medioambientales y Tech. (CIEMAT), Av. Complutense No. 22, 28040-Madrid, Spain. E-mail m.ballesteros(a)ciemat.es

SOURCE: Applied Biochemistry and Biotechnology, (2002) 98-100, 717-732, 28 ref.
ISSN: 0273-2289

DOCUMENT TYPE: Journal

LANGUAGE: English

ABSTRACT: The olive pulp fraction of olive pomace generated during centrifugal olive oil extraction may be upgraded by use of the cellulose fraction to produce ethanol and recovering high value phenols (tyrosol and hydroxytyrosol). Olive pulp was pretreated in a laboratory scale stirred autoclave at various temperature (150-250°C). Pretreatment was evaluated with respect to cellulose recovery, effectiveness of a subsequent enzymic hydrolysis, efficiency of ethanol production from the treated pulp by a simultaneous saccharification and fermentation (SSF) process and phenols recovery in the filtrate. Pretreatment of olive pulp using water at temperature between 200 and 250°C enhanced enzymic hydrolysis. Maximum ethanol production (11.9 g/l) was obtained from pulp pretreated at 210°C using a SSF fed-batch procedure. Maximum hydroxytyrosol recovery was obtained in the liquid fraction following pretreatment at 230°C.

CLASSIFICATION CODE: B (Biotechnology)

CONTROLLED TERM: CELLULOSES; ETHANOL; FERMENTATION PRODUCTS; FERMENTATION TECHNOLOGY; HEATING; OLIVE OILS ; PHENOLS; SACCHAROMYCES; TEMPERATURE; WASTES; HYDROLYSIS; POMACES; SACCHAROMYCES CEREVISIAE; SIMULTANEOUS SACCHARIFICATION AND FERMENTATION; TEMP.

L92 ANSWER 14 OF 14 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN

ACCESSION NUMBER: 2004-652775 [63] WPIDS

DOC. NO. CPI: C2004-233514

TITLE: Preparation of lamellarin compounds used as antitumor agent, comprises reacting bisarylacetylene compound with 3,4-dihydroisoquinoline compound.

DERWENT CLASS: A96 B02 B03

INVENTOR(S): ALBERICIO, F; ALVAREZ, M; CIRONI, P; CUEVAS, C; FRANCESCH, A; MARFIL, M

PATENT ASSIGNEE(S): (PHAR-N) PHARMA MAR SAU; (PHAR-N) PHARMA MAR SA; (RUFF-N) RUFFLES G K

COUNTRY COUNT: 109

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
WO 2004073598	A2	20040902	(200463)*	EN	89	A61K000-00	
RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE							
LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW							
W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE							
DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG							
KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ							

OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG
 US UZ VC VN YU ZA ZM ZW
 AU 2004212762 A1 20040902 (200559) C07D491-14
 EP 1613635 A2 20060111 (200604) EN C07D491-00
 R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV
 MC MK NL PT RO SE SI SK TR.

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2004073598	A2	WO 2004-GB683	20040220
AU 2004212762	A1	AU 2004-212762	20040220
EP 1613635	A2	EP 2004-713114	20040220
		WO 2004-GB683	20040220

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2004212762	A1 Based on	WO 2004073598
EP 1613635	A2 Based on	WO 2004073598

PRIORITY APPLN. INFO: GB 2003-3940 20030220

INT. PATENT CLASSIF.:

MAIN: A61K000-00; C07D491-00; C07D491-14
 SECONDARY: C07D207-00; C07D207-34

BASIC ABSTRACT:

WO2004073598 A UPAB: 20041001

NOVELTY - Preparation of lamellarin compounds (I) comprises reacting a bisarylacetylene compound (IV) with a 3,4-dihydroisoquinoline compound (III).

DETAILED DESCRIPTION - Preparation of lamellarin compounds of formula (I) comprises reacting a bisarylacetylene compound of formula (IV) with a 3,4-dihydroisoquinoline compound of formula (III).

R1-R15 = T, or

R1-R9, R12-R15 + an adjacent substituent = aryl, cycloalkyl or heterocyclyl;

T = aryl, alkyl or heteroaryl (all optionally substituted), H, halo, OH, OR', SH, SR', SOR', SO2R', NHR', N(R')2, NHCOR', N(COR')2, NHSO2R', OC(O)H, OC(O)R', COOH, COOR', 1-12C alkyl, 1-12C haloalkyl, 2-12C alkenyl or 2-12C alkynyl;

R' = 1-18C alkyl, 2-18C alkenyl, 2-18C alkynyl or aryl (all optionally substituted), H, OH, NO2, NH2, NHalkyl, N(alkyl)2, SH, Salkyl, CN, halo, O, C(O)H, C(O)alkyl, COOH or COOalkyl;

X = halo, and

at least one of the 3 phenyl rings in (I) is optionally substituted by a non aromatic heterocyclyl or substituted carbocyclyl, provided that one of R2, R3 or R4 is immobilized to a resin.

An INDEPENDENT CLAIM is also included for preparation of lamellarin compounds of formula (II) which comprises reacting halobenzene compound of formula (V) with a pyrrole compound of formula (VI).

R1a-R5a, R11a, R13a = T;

M = a metal function;

X1, X2 = halo, and

PG = amino protecting group,

the phenyl ring in (II) is optionally substituted by a non aromatic heterocyclyl or substituted carbocyclyl,

provided that one of R2-R4 is immobilized to a resin.

ACTIVITY - Cytostatic.

No biological data is given.

MECHANISM OF ACTION - Cell division inhibitor.

USE - Used for preparation of libraries of compounds used as antitumor agents.

ADVANTAGE - The process is efficient.

Dwg. 0/0

FILE SEGMENT: CPI

FIELD AVAILABILITY: AB; GI; DCN

MANUAL CODES: CPI: A12-V01; B04-C03; B06-E05; B07-D02; B14-H01

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L3 1 SEA FILE=REGISTRY ABB=ON HYDROXYTYROSOL/CN
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L5 698 SEA FILE=CAPLUS ABB=ON L3
L13 12341 SEA FILE=CAPLUS ABB=ON OLIVE OIL/CT
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L24 1 SEA FILE=CAPLUS ABB=ON (L13 OR L22) AND (L20 OR L21) AND ((L4 OR L5) OR L14)

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L3 1 SEA FILE=REGISTRY ABB=ON HYDROXYTYROSOL/CN
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L93

3 (L24 OR L26 OR L28) NOT

L89

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<http://scientific.thomson.com/media/scpdf/ipcrdwpi.pdf> <<<

=> d que l78; d que l79; d que l80; d que l82

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L71 5815 SEA FILE=WPIDS ABB=ON HYDROTHERMAL? OR HYDRO THERMAL?
L74 311 SEA FILE=WPIDS ABB=ON C07C029-74/IPC
L78 2 SEA FILE=WPIDS ABB=ON L74 AND (L70 OR L71)

L64 6039 SEA FILE=WPIDS ABB=ON OLIVE#
L65 243054 SEA FILE=WPIDS ABB=ON RESIDU?
L66 254301 SEA FILE=WPIDS ABB=ON WASTE#
L67 3 SEA FILE=WPIDS ABB=ON ALPERUJO OR ALPEORUJO

L68 99288 SEA FILE=WPIDS ABB=ON PHENOL#
L69 58 SEA FILE=WPIDS ABB=ON TYROSOL# OR HYDROXYTYROSOL#
L70 15477 SEA FILE=WPIDS ABB=ON AUTOCLAV?
L71 5815 SEA FILE=WPIDS ABB=ON HYDROTHERMAL? OR HYDRO THERMAL?
L75 12049 SEA FILE=WPIDS ABB=ON PLANT#(5A)((L65 OR L66))
L79 4 SEA FILE=WPIDS ABB=ON (L68 OR L69) AND (L70 OR L71) AND (L64
OR L75 OR L67)

L69 58 SEA FILE=WPIDS ABB=ON TYROSOL# OR HYDROXYTYROSOL#
L70 15477 SEA FILE=WPIDS ABB=ON AUTOCLAV?
L71 5815 SEA FILE=WPIDS ABB=ON HYDROTHERMAL? OR HYDRO THERMAL?
L80 1 SEA FILE=WPIDS ABB=ON L69 AND (L70 OR L71)

L68 99288 SEA FILE=WPIDS ABB=ON PHENOL#
L70 15477 SEA FILE=WPIDS ABB=ON AUTOCLAV?
L71 5815 SEA FILE=WPIDS ABB=ON HYDROTHERMAL? OR HYDRO THERMAL?
L81 1255 SEA FILE=WPIDS ABB=ON L68(3A)(EXTRACT? OR PURIF?)
L82 3 SEA FILE=WPIDS ABB=ON (L70 OR L71) AND L81

=> s (l78 or l79 or l80 or l82) not l90

L96

6 (L78 OR L79 OR L80 OR L82) NOT (L90)

*previously
printed*

=> fil JICST-EPLUS, AGRICOLA, PASCAL, FROSTI, CABA, BIOTECHNO, BIOSIS, BIOTECHDS,
FSTA, CONFSCI, CEABA-VTB, SCISEARCH

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=> d que 149; d que 152; d que 154;d que 155; d que 156; d que 159

L2 1 SEA FILE=REGISTRY ABB=ON TYROSOL/CN
L3 1 SEA FILE=REGISTRY ABB=ON HYDROXYTYROSOL/CN
L34 274560 SEA PHENOL#
L35 2028 SEA TYROSOL# OR HYDROXYTYROSOL#
L36 30229 SEA AUTOCLAV?
L37 71654 SEA HYDROTHERMAL? OR HYDRO THERMAL?
L38 1320943 SEA RESIDU?
L39 625929 SEA WASTE#
L40 306 SEA L2
L41 223 SEA L3
L48 579 SEA (L36 OR L37) (5A) ((L38 OR L39))
L49 15 SEA L48 AND ((L34 OR L35) OR (L40 OR L41))

L2 1 SEA FILE=REGISTRY ABB=ON TYROSOL/CN
L3 1 SEA FILE=REGISTRY ABB=ON HYDROXYTYROSOL/CN
L34 274560 SEA PHENOL#
L35 2028 SEA TYROSOL# OR HYDROXYTYROSOL#
L36 30229 SEA AUTOCLAV?
L37 71654 SEA HYDROTHERMAL? OR HYDRO THERMAL?
L40 306 SEA L2
L41 223 SEA L3
L51 28672 SEA (OLIVE# OR OLIVE OIL)/CT,ST
L52 17 SEA L51 AND (L36 OR L37) AND ((L34 OR L35) OR (L40 OR L41))

L2 1 SEA FILE=REGISTRY ABB=ON TYROSOL/CN
L3 1 SEA FILE=REGISTRY ABB=ON HYDROXYTYROSOL/CN
L34 274560 SEA PHENOL#
L35 2028 SEA TYROSOL# OR HYDROXYTYROSOL#
L36 30229 SEA AUTOCLAV?
L37 71654 SEA HYDROTHERMAL? OR HYDRO THERMAL?
L40 306 SEA L2
L41 223 SEA L3
L50 94 SEA ALPERUJO OR ALPEORUJO
L54 13 SEA L50 AND (L36 OR L37) AND ((L34 OR L35) OR (L40 OR L41))

L2 1 SEA FILE=REGISTRY ABB=ON TYROSOL/CN
L3 1 SEA FILE=REGISTRY ABB=ON HYDROXYTYROSOL/CN
L34 274560 SEA PHENOL#
L35 2028 SEA TYROSOL# OR HYDROXYTYROSOL#
L36 30229 SEA AUTOCLAV?
L37 71654 SEA HYDROTHERMAL? OR HYDRO THERMAL?
L38 1320943 SEA RESIDU?
L39 625929 SEA WASTE#

L40 306 SEA L2
L41 223 SEA L3
L53 40633 SEA PLANT#(3A) (L38 OR L39)
L55 2 SEA L53 AND (L36 OR L37) AND ((L34 OR L35) OR (L40 OR L41))

L2 1 SEA FILE=REGISTRY ABB=ON TYROSOL/CN
L3 1 SEA FILE=REGISTRY ABB=ON HYDROXYTYROSOL/CN
L36 30229 SEA AUTOCLAV?
L37 71654 SEA HYDROTHERMAL? OR HYDRO THERMAL?
L40 306 SEA L2
L41 223 SEA L3
L56 5 SEA (L40 OR L41) AND (L36 OR L37)

L33 71147 SEA OLIVE#
L34 274560 SEA PHENOL#
L35 2028 SEA TYROSOL# OR HYDROXYTYROSOL#
L36 30229 SEA AUTOCLAV?
L37 71654 SEA HYDROTHERMAL? OR HYDRO THERMAL?
L38 1320943 SEA RESIDU?
L39 625929 SEA WASTE#
L50 94 SEA ALPERUJO OR ALPEORUJO
L51 28672 SEA (OLIVE# OR OLIVE OIL)/CT,ST
L53 40633 SEA PLANT#(3A) (L38 OR L39)
L57 8642 SEA (L34 OR L35) (3A) EXTRACT?
L58 36 SEA L57 AND (L36 OR L37)
L59 7 SEA (L53 OR L33 OR L51 OR L50) AND L58

=> s (l49 or l52 or l54 or l55 or l56 or l59) not l91

COMMAND INTERRUPTED

=> s l49 not l91
L97 14 L49 NOT L91

=> s l52 not l91
L98 13 L52 NOT L91

=> s l54 not l91
L99 13 L54 NOT L91

=> s l55 not l91
L100 1 L55 NOT L91

=> s l56 not l91
L101 3 L56 NOT L91

=> s l59 not l91
L102 7 L59 NOT L91

=> s l97-l102
L103 24 (L97 OR L98 OR L99 OR L100 OR L101 OR L102)

=> dup rem l93,l103,l96
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PROCESSING COMPLETED FOR L93

PROCESSING COMPLETED FOR L103

PROCESSING COMPLETED FOR L96

L104 20 DUP REM L93 L103 L96 (13 DUPLICATES REMOVED)

ANSWERS '1-3' FROM FILE CAPLUS

ANSWER '4' FROM FILE JICST-EPLUS

ANSWERS '5-6' FROM FILE AGRICOLA

ANSWERS '7-9' FROM FILE PASCAL

ANSWERS '10-12' FROM FILE BIOTECHDS

ANSWERS '13-14' FROM FILE SCISEARCH

ANSWERS '15-20' FROM FILE WPIDS

=> d ibib ed abs hitind 1-3; d iall 4-20; fil hom

L104 ANSWER 1 OF 20 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:259949 CAPLUS

DOCUMENT NUMBER: 142:318563

TITLE: Method for extraction of cork-containing materials
using a compressed gas

INVENTOR(S): Stork, Kurt

PATENT ASSIGNEE(S): Degussa AG, Germany

SOURCE: PCT Int. Appl., 18 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005025825	A1	20050324	WO 2004-EP10133	20040910
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10341637	A1	20050504	DE 2003-10341637	20030910
PRIORITY APPLN. INFO.:			DE 2003-10341637	A 20030910
ED Entered STN: 25 Mar 2005				
AB Described is a method for extraction of cork-containing materials, suitable for use in food sector, with a compressed gas (supercrit. CO ₂) at 10-120 ° (especially 40-100°) and 10-600 bars (especially 100-150 bars), whereby the gas flows in a radial or axial direction through the charge/packing, which is combined with an adsorbents to remove (chlorinated) phenols and anisoles, especially pentachlorophenol, trichloro anisole and tetrachloro anisole as well as waxes and fats. The weight ratio of compressed gas to cork material is 20 to 70:1. Furthermore, 0.1-10 weight% of a carrier or co-solvents is added to the gas such as water, ether or C1-5-alcs. The procedure is carried out under isobaric conditions in at least one autoclave, preferably in at least two autoclaves arranged in series.				
IC	ICM B27K007-00			
	ICS B01D011-02			
CC	43-2 (Cellulose, Lignin, Paper, and Other Wood Products)			
IT	Phenols, processes			
	RL: POL (Pollutant); REM (Removal or disposal); OCCU (Occurrence); PROC (Process)			
	(chlorophenols; method for extraction of cork-containing materials using a compressed gas)			
IT	Adsorbents			
	Autoclaves			
	Cork			
	Extraction			
	(method for extraction of cork-containing materials using a compressed gas)			
IT	Fats and Glyceridic oils, processes			
	Phenols, processes			
	Waxes			
	RL: POL (Pollutant); REM (Removal or disposal); OCCU (Occurrence); PROC (Process)			
	(method for extraction of cork-containing materials using a compressed gas)			
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT				
L104 ANSWER 2 OF 20 CAPLUS COPYRIGHT 2006 ACS on STN				
ACCESSION NUMBER: 2004:45451 CAPLUS				
DOCUMENT NUMBER: 140:253239				

TITLE: Isolation of Antimicrobials and Antioxidants from Moso-Bamboo (*Phyllostachys Heterocycla*) by Supercritical CO2 Extraction and Subsequent **Hydrothermal Treatment of the Residues**

AUTHOR(S): Quitain, Armando T.; Katoh, Shunsaku; Moriyoshi, Takashi

CORPORATE SOURCE: Research Institute for Solvothermal Technology, Takamatsu, Kagawa, 761-0301, Japan

SOURCE: Industrial & Engineering Chemistry Research (2004), 43(4), 1056-1060
CODEN: IECRED; ISSN: 0888-5885

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English *Not good date*

ED Entered STN: 20 Jan 2004

AB Supercrit. CO2 with or without EtOH (as the cosolvent) was used to isolate antimicrobials and antioxidants from moso-bamboo (*Phyllostachys heterocycla*). The exts. contained three predominant EtOH-soluble compds. identified by gas chromatog.-mass spectrometry as an ethoxyquin, a sesquiterpene, and a cyclohexanone derivative. The optimum extraction temperature for the three compds. was 60° at a pressure of 20 MPa. The EtOH-insol. compds. consisted of mostly paraffins or waxes. Hydrothermal treatment of extraction residues produced hydroquinone and benzoquinone. Hydroxycinnamic acid, a known antioxidant, was also obtained by microwave pyrolysis of extraction residues.

CC 23-2 (Aliphatic Compounds)
Section cross-reference(s): 10

IT Antimicrobial agents
Antioxidants
(isolation from moso-bamboo by supercrit. CO2 extraction and subsequent **hydrothermal treatment of residues**)

IT Hydrocarbons, preparation
Phenols, preparation
RL: PUR (Purification or recovery); PREP (Preparation)
(isolation from moso-bamboo by supercrit. CO2 extraction and subsequent **hydrothermal treatment of residues**)

IT 367-29-3P, 5-Fluoro-2-methylaniline 614-60-8P 629-99-2P, Pentacosane 1450-72-2P 2613-61-8P, 2,4,6-Trimethylheptane 2765-11-9P, Pentadecanal 7098-21-7P, Tritetracontane 15356-74-8P 16489-90-0P 54410-98-9P, 4,6,8-Trimethyl-1-nonene 61142-06-1P, Tetrahydrobenzocyclodecene 69296-90-8P 207297-57-2P
RL: PUR (Purification or recovery); PREP (Preparation)
(isolation from moso-bamboo by supercrit. CO2 extraction and subsequent **hydrothermal treatment of residues**)

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

NO GOOD DATE!

L104 ANSWER 3 OF 20 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:552557 CAPLUS

DOCUMENT NUMBER: 138:74885

TITLE: Effect of thermal treatment on chemical composition of oak wood

AUTHOR(S): Konovalova, N. N.; Konovalov, N. T.; Pekarev, V. Ya.; Antonova, G. F.; Varaksina, T. N.; Kishkovskii, Z. N.

CORPORATE SOURCE: Gruppa Predpriyatii "OST", Chernogolovka, Russia

SOURCE: Materialovedenie (2002), (5), 27-33
CODEN: MATEC5

PUBLISHER: OOO Nauka i Tekhnologii

DOCUMENT TYPE: Journal

LANGUAGE: Russian

ED Entered STN: 26 Jul 2002

AB Samples of freshly cut oakwood (FOW) and oak wood preliminarily dried for 3 yr (DOW) were soaked in water and subjected to heat treatment at 125-210° for 1-3 h, and the content of extractive compds. of treated samples was compared. The study was conducted with the aim to determine the optimum hydrothermal treatment conditions giving wood best suited for wine barrels. The best results, i.e., formation of organic compds. most suitable in wine making, were obtained by treating FOW either at 150° for 2 h or at 170° for 1 h. Treatment of DOW resulted in a 1.5-times lower formation of lac.-soluble extractives, compared to FOW; the amts. of phenols, phenolic acids, and bonded phenols formed from DOW was 1.5-times lower than those from FOW. Thermal treatment of DOW led to an increase of lignin content (39.4% form DOW heated at 210° vs. 31.78% for FOW.). The most promising treatment of DOW occurred at 125°.

CC 43-2 (Cellulose, Lignin, Paper, and Other Wood Products)
Section cross-reference(s): 17

ST fresh dried oakwood **hydrothermal** treatment extractive compd
formation; wine barrel oakwood thermal treatment extractive compd
formation

IT Carbohydrates, analysis
Flavanols

Phenols, analysis

Uronic acids

RL: ANT (Analyte); ANST (Analytical study)

(effect of thermal treatment on formation of **extractive**
compds. in oak wood in relation to use of oakwood for wine barrels)

L104 ANSWER 4 OF 20 JICST-EPlus COPYRIGHT 2006 JST on STN

ACCESSION NUMBER: 960979708 JICST-EPlus

TITLE: Chemical Composition of Organic Compound in Waste
Water from **Hydrothermal** Treatment of Brown Coal
and Promotion Method of its Polymerization and
Sedimentation.

AUTHOR: MAKINO EIICHIRO; OKUYAMA NORIYUKI; KAGEYAMA YOICHI

CORPORATE SOURCE: Nihon Kattan Ekika

SOURCE: Nippon Kagakkai Koen Yokoshu, (1996) vol. 71st, pp. 211.
Journal Code: S0493A
ISSN: 0285-7626

PUB. COUNTRY: Japan

LANGUAGE: Japanese

STATUS: New

ABSTRACT:

Organic compounds soluble in waste water from **hydrothermal** treatment of Yallourn and South Banko brown coal are analyzed to solve their structure and the promotion method of their polymerization and sedimentation is investigated to reduce the contamination of waste water. The total carbon of the identified organic compounds such as carboxylic acid, **phenol** and catechol is about 60% of total organic carbon in waste water. The value of COD of waste water from Yallourn and South Banko brown coal is decreased to 3/5 and 1/2 respectively by the combination of aeration and adjustment of pH. With this waste water treatment, the content of carboxylic acid such as acetic acid did not change very much but catechol and methyl-catechol are removed completely. This phenomenon suggests that the above treatment promotes polymerization and sedimentation of phenolic compounds and high boiling point compounds which can not be detected by GC. (author abst.)

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DUPLICATE 1

ACCESSION NUMBER: 2004:52913 AGRICOLA *Not good date*
DOCUMENT NUMBER: IND43651052
TITLE: Total recovery of the waste of two-phase olive oil processing: isolation of added-value compounds.
AUTHOR(S): Fernandez-Bolanos, J.; Rodriguez, G.; Gomez, E.; Guillen, R.; Jimenez, A.; Heredia, A.; Rodriguez, R.
AVAILABILITY: DNAL (381 J8223)
SOURCE: Journal of agricultural and food chemistry, 2004 Sept. 22 Vol. 52, no. 19 p. 5849-5855
ISSN: 0021-8561
NOTE: Includes references
DOCUMENT TYPE: Article
FILE SEGMENT: Other US
LANGUAGE: English
ABSTRACT:

A process for the value addition of solid waste from two-phase olive oil extraction or "alperujo" that includes a **hydrothermal** treatment has been suggested. In this treatment an autohydrolysis process occurs and the solid olive byproduct is partially solubilized. From this water-soluble fraction can be obtained besides the antioxidant *****hydroxytyrosol***** several other compounds of high added value. In this paper three different samples of **alperujo** were characterized and subjected to a **hydrothermal** treatment with and without acid catalyst. The main soluble compounds after the hydrolysis were represented by monosaccharides xylose, arabinose, and glucose; oligosaccharides, mannitol and products of sugar destruction. Oligosaccharides were separated by size exclusion chromatography. It was possible to get highly purified mannitol by applying a simple purification method.

CAS REGISTRY NO.: 147-81-9 (ARABINOSE)
8001-25-0 (OLIVE OIL)
10597-60-1 (HYDROXYTYROSOL)
66455-21-8 (OLIGOSACCHARIDES)
50-99-7Q, 25191-16-6Q, 58367-01-4Q (GLUCOSE)
58-86-6Q, 25990-60-7Q (XYLOSE)
69-65-8Q, 87-78-5Q (MANNITOL)

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DUPLICATE 2

ACCESSION NUMBER: 2003:15174 AGRICOLA *Not good date*
DOCUMENT NUMBER: IND23307529
TITLE: Production in large quantities of highly purified **hydroxytyrosol** from liquid-solid waste of two-phase olive oil processing or "alperujo".
AUTHOR(S): Fernandez-Bolanos, J.; Rodriguez, G.; Rodriguez, R.; Heredia, A.; Guillen, R.; Jimenez, A.
AVAILABILITY: DNAL (381 J8223)
SOURCE: Journal of agricultural and food chemistry, Nov 6, 2002. Vol. 50, No. 23. p. 6804-6811
Publisher: Washington, D.C. : American Chemical Society.

NOTE: CODEN: JAFCAU; ISSN: 0021-8561
Includes references
PUB. COUNTRY: District of Columbia; United States
DOCUMENT TYPE: Article
FILE SEGMENT: U.S. Imprints not USDA, Experiment or Extension
LANGUAGE: English
ABSTRACT:

The effect of **hydrothermal** treatment of two-phase **olive**
waste (**alperujo**) on the solubilization of
hydroxytyrosol was studied. Different conditions of saturated steam
were assayed. A high amount of **hydroxytyrosol** was solubilized and
increased with increasing steaming temperature and time, reaching 1.4-1.7 g/100
g of dry **alperujo**. The effect of acidic (H₂SO₄) and basic (NaOH)
catalysts was also evaluated. Acid-catalyzed treatment was more effective at
milder conditions, whereas the alkali-catalyzed conditions were not very
suitable. In the present study, the **extracted hydroxytyrosol**
was purified by means of a new, simple, and inexpensive chromatographic system,
under international patent application (PCT/ES02/00058). From 1000 kg of
alperujo, with 70% humidity, can be obtained approximately 4.5-5 kg of
hydroxytyrosol. After a purification process, at least 3 kg of
hydroxytyrosol, at 90-95% purity, would be obtained. The purified
compound was identified by HPLC/UV and ¹H and ¹³C NMR analyses, and its
antioxidant activity was tested on refined **olive** oil without
antioxidants by Rancimat method. The oxidative stability of refined
olive oil was increased by a factor of 1.71 in the presence of 100 ppm
of **hydroxytyrosol**.

CLASSIFICATION: Q105 Food Processing, Horticultural Crop Products
CONTROLLED TERM (CABA): acid treatment; factory effluents; heat treatment;
industrial wastes; oils and fats industry; **olive**
oil; phenolic compounds; purification; sodium
hydroxide treatment; solubilization; steaming;
sulfuric acid
SUPPLEMENTARY TERM: **hydrothermal** treatment; steam treatment
CAS REGISTRY NO.: 1310-73-2 (NAOH)
1310-73-2 (SODIUM HYDROXIDE)
7664-93-9 (H₂SO₄)
7664-93-9 (SULFURIC ACID)
8001-25-0 (OLIVE OIL)
10597-60-1 (HYDROXYTYROSOL)

L104 ANSWER 7 OF 20 PASCAL COPYRIGHT 2006 INIST-CNRS. ALL RIGHTS RESERVED.
on STN DUPLICATE 3

ACCESSION NUMBER: 1997-0298532 PASCAL
COPYRIGHT NOTICE: Copyright .COPYRGT. 1997 INIST-CNRS. All rights
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TITLE (IN ENGLISH): **Hydrothermal** oxidation of organic **wastes** using ammonium nitrate **NO GOOD!**
AUTHOR: PROESMANS P. I.; LUAN L.; BUELOW S. J.
CORPORATE SOURCE: Los Alamos National Laboratory, Chemical Science and
Technology Division, CST-6, Mailstop J567, Los Alamos,
New Mexico 87545, United States
SOURCE: Industrial & engineering chemistry research, (1997),
36(5), 1559-1566, 24 refs.
ISSN: 0888-5885 CODEN: IECRED
DOCUMENT TYPE: Journal
BIBLIOGRAPHIC LEVEL: Analytic
COUNTRY: United States
LANGUAGE: English
AVAILABILITY: INIST-120F, 354000065439130240

ABSTRACT: The use of ammonium nitrate as an oxidizing agent in hydrothermal oxidation of organic compounds was investigated. The oxidation of model compounds, methanol, acetic acid, and **phenol**, was studied at 500 °C and 345 bar. High organic, ammonia, and nitrate removal was achieved at stoichiometric concentrations. The oxidation of ammonia by nitrate was much faster than the oxidation of either methanol or acetic acid and only slightly faster than **phenol**. Nitrogen products included N.sub.2, N.sub.2O, and NO.sub.2.sup.- as well as toxic NO and trace amounts of NO.sub.2. Carbon products were CO.sub.2, HCO.sub.3.sup.-, CO.sub.3.sup.2.sup.-, and CO. The co-oxidant system with hydrogen peroxide and ammonium nitrate was studied to eliminate the NO.sub.x production. Stoichiometric concentrations of hydrogen peroxide to the carbon concentrations resulted in undetectable NO.sub.x levels.

CLASSIFICATION CODE: 001D16B02; Applied sciences; Pollution, Nuisances; Wastes

CONTROLLED TERM: Waste treatment; Hydrothermal treatment; Oxidation; Organic compounds; Ammonium nitrate; Reaction mechanism

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ACCESSION NUMBER: 1991-0271159 PASCAL

TITLE (IN ENGLISH): Application of the jet-reactor technology to the wet oxidation of waste-waters from the olive industries

TITLE (IN SPANISH): Aplicacion de la tecnologia jet-reactor a la oxidacion humeda de las aguas residuales de las industrias derivadas del olivo

AUTHOR: GARCIA GARCIA P.; GARRIDO FERNANDEZ A.; CHAKMAN A.; LEMONIER J. P.; OVEREND R. P.; CHORNET E.

CORPORATE SOURCE: CSIC, inst. grasa derivados, Sevilla, Spain

SOURCE: Grasas y aceites (Sevilla), (1990), 41(2), 158-162, 5 refs.
ISSN: 0017-3495

DOCUMENT TYPE: Journal

BIBLIOGRAPHIC LEVEL: Analytic

COUNTRY: Spain

LANGUAGE: Spanish

SUMMARY LANGUAGE: English

AVAILABILITY: INIST-1755, 354000017048660080

ABSTRACT: This paper studies the application of the jet-reactor technology, which increases considerably the contact area, discussing the best conditions of pressure and temperature for the oxidation. The depuration degree reached using pure O.sub.2 or just air is similar, and considerably higher than using the **autoclave**. The final treated wastewater usually contains only 10% of the initial organic carbon

CLASSIFICATION CODE: 002A35A05; Life sciences; Biological sciences; Agriculture, Food industry

CONTROLLED TERM: Waste water purification; Oil plant; **Olive**; Air injection; Pressure; Degradation; Oxidation; Temperature; **Phenols**

L104 ANSWER 9 OF 20 PASCAL COPYRIGHT 2006 INIST-CNRS. ALL RIGHTS RESERVED.

on STN

ACCESSION NUMBER: 1990-0149209 PASCAL
 TITLE (IN ENGLISH): Purification of polyphenolic-rich wastewaters: application of the wet oxidation to the aqueous effluents from the olive industries
 TITLE (IN FRENCH): Purification des eaux residuaires riches en polyphenols: application de l'oxydation humide aux effluents aqueux issus de l'industrie de transformation des olives
 TITLE (IN SPANISH): Purificacion de aguas residuales ricas en polifenoles: aplicacion de la oxidacion humeda a los efluentes acuosos derivados de las industrias olivaderas
 AUTHOR: GARCIA GARCIA P.; GARRIDO FERNANDEZ A.; CHAKMAN A.; LEMONIER J. P.; OVEREND R. P.; CHORNET E.
 CORPORATE SOURCE: Inst. grasa derivados, Sevilla, Spain
 SOURCE: Grasas y aceites (Sevilla), (1989), 40(4-5), 291-295, 4 refs.
 ISSN: 0017-3495
 DOCUMENT TYPE: Journal
 BIBLIOGRAPHIC LEVEL: Analytic
 COUNTRY: Spain
 LANGUAGE: Spanish
 SUMMARY LANGUAGE: English
 AVAILABILITY: CNRS-1755
 ABSTRACT (IN FRENCH): Application de l'oxydation en autoclave a l'epuration des solutions de soude et d'alpechine. Conditions operatoires et cinetiques de degradation, efficacite de la methode
 CLASSIFICATION CODE: 002A35B09; Life sciences; Biological sciences; Agriculture, Food industry
 CONTROLLED TERM: Olive; By product; Waste water; Waste treatment; Phenols; Caustic soda; Oxidation; Autoclave; Kinetics

L104 ANSWER 10 OF 20 BIOTECHDS COPYRIGHT 2006 THE THOMSON CORP. on STN

ACCESSION NUMBER: 1998-11484 BIOTECHDS

TITLE: The biodegradation of recalcitrant effluents from an olive mill by a white-rot fungus;
 waste-disposal using Lentinus edodes

AUTHOR: D'Annibale A; Crestini C; Vinciguerra V; Sermanni G G

CORPORATE SOURCE: Univ.Tuscia

LOCATION: Department of Agrobiolgy and Agrochemistry, Tuscia University, Via San Camillo de Lellis s.n.c., 01100 Viterbo, Italy.

Email: crestini@unitus.it

SOURCE: J.Biotechnol.; (1998) 61, 3, 209-18

CODEN: JBITD4

ISSN: 0168-1656

DOCUMENT TYPE: Journal

LANGUAGE: English

ABSTRACT: The aim of this study was to assess the possibility of using the polyurethane-sponge-immobilized mycelium of Lentinula edodes (strain SC-495) in the biodegradation of olive mill waste-water (OMW). L. edodes was subcultured on potato-dextrose agar slants. Cultures for immobilization contained 1 cm cubes of sponge autoclaved in 200 ml of the medium used for the inoculum. Inoculation was performed with 5 ml of inoculum and cultures were incubated at 28 deg on a gyratory shaker. The average immobilization yield was 8%. Biodegradation of OMW was performed by the

polyurethane-immobilized mycelium of *L. edodes*. Throughout 3 consecutive treatment cycles of the effluent significant abatements of its polluting characteristics were observed. In fact, its contents in total organic carbon, total **phenols**, total ortho-diphenol were dramatically reduced. In addition, a significant effluent decolorization was evident. (45 ref)

CLASSIFICATION: M WASTE DISPOSAL AND THE ENVIRONMENT; M1 Industrial Waste Disposal; K BIOCATALYSIS; K2 Application
CONTROLLED TERMS: **OLIVE** MILL WASTE-DISPOSAL, DECOLORIZATION, LENTINUS **EDODES** CULTURE, IMMOBILIZATION ON POLYURETHANE SPONGE SUPPORT
WHITE-ROT FUNGUS POLLUTANT DEGRADATION (VOL.17, NO.26)

L104 ANSWER 11 OF 20 BIOTECHDS COPYRIGHT 2006 THE THOMSON CORP. on STN

ACCESSION NUMBER: 1987-02106 BIOTECHDS

TITLE: Alcohol production from organic waste;
by fermentation, chemical treatment and autoclaving;
production of methanol, iso-propanol and biogas

PATENT ASSIGNEE: Maison-Carillon

PATENT INFO: CA 1213233 28 Oct 1986

APPLICATION INFO: CA 1984-457164 21 Jun 1984

PRIORITY INFO: CA 1984-457164 21 Jun 1984

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: WPI: 1986-311851 [48]

ABSTRACT: Production of lower alkanols from organic residues and/or effluents is effected by (a) subjecting the **residues**, if any, to hydrolysis by **autoclaving** with a heated Na₂CO₃ solution and then with a solution of Al isopropoxide or iso-propanol, NaOAc or HOAc; (b) fermenting the effluents and/or hydrolyzed residues in the presence of amylase at 40 deg for 35 min; (c) adding basic aluminate acetate and pyruvic acid, propionic acid or a mixture of HCHO and **phenol** or sulfonated **phenol** at 40 deg for 5 min; (d) heating at 120-160 deg under a pressure of at least 1.5 kg/sq cm for 55 min in an O₂-free atmosphere; and (e) distilling off the alkanols produced. Production of biogas from effluents of hydrolyzed residues is effected by (a) preheating the effluents, if any, in the presence of Na₂CO₃ and acetic acid at 40 deg for 35 min; (b) fermenting the preheated effluents or hydrolyzed residues in the presence of amylase; and (c) recovering the gas produced. The processes are capable of producing alkanols (especially methanol and iso-propanol) or biogas from whey, excrement, must, wort, straw, peat moss, biomass etc. in less than 2 hr. (15pp)

CLASSIFICATION: G ENERGY; G1 Fuels; A MICROBIOLOGY; A2 Fermentation; M WASTE DISPOSAL; M1 Industrial Waste Disposal

CONTROLLED TERMS: METHANOL PREP., ISO-PROPANOL PREP., BIOGAS PREP., ORG. RESIDUE, EFFLUENT FERMENTATION, CHEM. TREATMENT, AUTOCLAVING, WASTE-DISPOSAL ALCOHOL

L104 ANSWER 12 OF 20 BIOTECHDS COPYRIGHT 2006 THE THOMSON CORP. on STN

ACCESSION NUMBER: 1985-05205 BIOTECHDS

TITLE: Microbiological degradation of malodorous substances from swine waste in aerobic condition;
using e.g. *Listeria* sp., *Arthrobacter flavescens* etc.; pig waste-disposal (conference abstract)

AUTHOR: Bisailon J G; Bourque D; Beaudet R; Sylvestre M; Ishaque M

LOCATION: Bacteriol. Res. Ct. Quebec Univ., Institut Armand-Frappier,

Laval, Quebec, Canada.

SOURCE: Abstr. Annu. Meet. Am. Soc. Microbiol.; (1985) 85 Meet., 239

DOCUMENT TYPE: Journal

LANGUAGE: English

ABSTRACT: Microbiological degradation of **phenol**, p-cresol and low mol. weight volatile fatty acids (acetic, propionic, isobutyric, butyric, isovaleric, valeric) of pig waste was investigated. Aeration of the waste allowed the indigenous microorganisms to grow and degrade the malodorous substances. Using minimal media which contained these substances as sole C-sources, microorganisms that can grow on these media were selected from the waste. When inoculated in autoclaved pig waste the following selected strains were able to degrade: *Acinetobacter calcoaceticus*: **phenol**, volatile fatty acids; *Alcaligenes faecalis*: p-cresol, volatile fatty acids; *Listeria* and *Micrococcus*: **phenol**, p-cresol, some of the volatile fatty acids; *Arthrobacter flavescens*: volatile fatty acid. At a laboratory scale, the inoculation of pig waste with a strain such as *Listeria* accelerated the degradation of malodorous substances; instead of taking 4 days at 15 deg deodorization occurred in 2 days. (0 ref)

CLASSIFICATION: M WASTE DISPOSAL; M1 Industrial Waste Disposal; K BIOCATALYSIS; K2 Application

CONTROLLED TERMS: AEROBIC **PHENOL** DEGRADATION, P-CRESOL DEGRADATION, VOLATILE FATTY ACID DEGRADATION ETC., *LISTERIA* SP., *ALCALIGENES FAECALIS*, *ACINETOBACTER CALCOACETICUS* ETC., PIG WASTE-DISPOSAL, DEODORIZATION

L104 ANSWER 13 OF 20 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 2004:944392 SCISEARCH

THE GENUINE ARTICLE: 863DK

TITLE: Basic study on treatment of waste polyvinyl chloride plastics by **hydrothermal** decomposition in subcritical and supercritical regions

AUTHOR: Takeshita Y (Reprint); Kato K; Takahashi K; Sato Y; Nishi S

CORPORATE SOURCE: Nippon Telegraph & Tel Publ Corp, Environm Management & Provisioning Project, 3-9-11 Midori Cho, Musashino, Tokyo 1808585, Japan (Reprint); Nippon Telegraph & Tel Publ Corp, Environm Management & Provisioning Project, Musashino, Tokyo 1808585, Japan; Nippon Telegraph & Tel Publ Corp, Energy & Environm Syst Labs, Atsugi, Kanagawa 2430198, Japan; Nippon Telegraph & Tel Publ Corp, Adv Technol Corp, Atsugi, Kanagawa 2430198, Japan takesita@aecl.ntt.co.jp

COUNTRY OF AUTHOR: Japan

SOURCE: JOURNAL OF SUPERCRITICAL FLUIDS, (OCT 2004) Vol. 31, No. 2, pp. 185-193. ISSN: 0896-8446.

PUBLISHER: ELSEVIER SCIENCE BV, PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS.

DOCUMENT TYPE: Article; Journal

LANGUAGE: English

REFERENCE COUNT: 22

ENTRY DATE: Entered STN: 18 Nov 2004
Last Updated on STN: 18 Nov 2004

ABSTRACT: We are developing a process for treating waste plastics in an

environmentally friendly way. The increased awareness of possible problems caused by waste PVC plastics is leading to a need to develop a reliable technique for treating them in a safe and environmentally friendly way, that is, in a way that does not lead to the release of chlorinated organic compounds. We focused on using water vapor at sublimation pressure and subcritical and supercritical water as solvents for treatment. We found that the chlorine in PVC dissolved in water as hydrochloric acid, and no harmful chlorinated organic compounds were observed in the liquid and gas fractions after treatment at 300degreesC. Between 250 and 350degreesC, this technique produced polyene as a residual solid, and low-molecular weight aromatic and aliphatic compounds in the liquid and gas fractions. Further decomposition at over 350degreesC in supercritical water produced acetone, **phenol**, benzene, benzene derivatives, and aliphatic alkane and alkene in the liquid and gas fractions. The combustion enthalpy of the residual solid was 9270 kcal/kg, which is in the same range as the values for coal and coke, so it has good potential as a fuel ingredient. This technique is promising for establishing a non-toxic and almost perfectly closed system for the treatment of waste PVC in a sustainable society. (C) 2003 Elsevier B.V. All rights reserved.

CATEGORY: CHEMISTRY, PHYSICAL; ENGINEERING, CHEMICAL
 SUPPLEMENTARY TERM: polyvinyl chloride; PVC; supercritical and subcritical regions; decomposition; dechlorination; waste plastics
 SUPPL. TERM PLUS: THERMAL-DEGRADATION; WATER; PVC; DECHLORINATION; MECHANISM
 REFERENCE(S):

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	ARN PG (RPG)	Referenced Work (RWK)
*JAP ENV MAN ASS I	1998		70	TECHN REG PREV POLL
BAUM B	1958	28	537	J POLYM SCI
ENDO K	2001	74	113	POLYM DEGRAD STABIL
ENDO K	2001	50	434	POLYM APPL
ENOMOTO H	1995	6	16	HAIKIBUTSU GAKKAISHI
KELLEN T	1978	1	79	POLYM B
KUBATOVA A	2002	36	1337	ENVIRON SCI TECHNOL
MCNEILL I C	1995	49	181	POLYM DEGRAD STABIL
OWEN E D	1984		1	DEGRADATION STABILIS
OWEN E D	1984		21	DEGRADATION STABILIZ
SATO Y	1998	37	6270	JPN J APPL PHYS 1
STARNES W H	1981	3	135	DEV POLYM DEGRADATIO
STRANDBERG L	1981	3	153	J OCCUPATIONAL ACCID
TAKAHASHI K	2001	58	697	KOBUNSHI RONBUNSHU
TAKESHITA Y	2000	39	4496	IND ENG CHEM RES
TAKESHITA Y	2002	12	205	REV HIGH PRESS SCI T
TAKESHITA Y	2002	24	91	J SUPERCRIT FLUID
TRAN V H	1992	42	189	POLYM DEGRAD STABIL
TSUJI T	1998	8	546	NIHON KAGAKU KAISHI
WINKLER D E	1959	35	3	J POLYM SCI
YAMASAKI N	1996	33	8	WASTE RESOUR
YOSHIOKA T	1994	45	563	KAGAKU KOGYO

L104 ANSWER 14 OF 20 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 1992:736513 SCISEARCH

THE GENUINE ARTICLE: KD096

TITLE: ALLELOPATHIC ACTIVITY IN WHEAT-CONVENTIONAL AND WHEAT-NO-TILL SOILS - DEVELOPMENT OF SOIL EXTRACT BIOASSAYS

AUTHOR: BLUM U (Reprint); GERIG T M; WORSHAM A D; HOLAPPA L D; KING L D

CORPORATE SOURCE: N CAROLINA STATE UNIV, DEPT BOT, RALEIGH, NC 27695

(Reprint); N CAROLINA STATE UNIV, DEPT STAT, RALEIGH, NC 27695; N CAROLINA STATE UNIV, DEPT CROP SCI, RALEIGH, NC 27695; N CAROLINA STATE UNIV, DEPT SOIL SCI, RALEIGH, NC 27695

COUNTRY OF AUTHOR: USA
SOURCE: JOURNAL OF CHEMICAL ECOLOGY, (DEC 1992) Vol. 18, No. 12, pp. 2191-2221.
ISSN: 0098-0331.
PUBLISHER: PLENUM PUBL CORP, 233 SPRING ST, NEW YORK, NY 10013.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: AGRI
LANGUAGE: English
REFERENCE COUNT: 44
ENTRY DATE: Entered STN: 1994
Last Updated on STN: 1994

ABSTRACT:

The primary objective of this research was to determine if soil extracts could be used directly in bioassays for the detection of allelopathic activity. Here we describe: (1) a way to estimate levels of allelopathic compounds in soil; (2) how pH, solute potential, and/or ion content of extracts may modify the action of allelopathic compounds on germination and radicle and hypocotyl length of crimson clover (*Trifolium incarnatum* L.) and ivy-leaved morning glory (*Ipomoea hederacea* L. Jacquin.); and (3) how biological activity of soil extracts may be determined. A water-autoclave extraction procedure was chosen over the immediate-water and 5-hr EDTA extraction procedures, because the autoclave procedure was effective in extracting solution and reversibly bound ferulic acid as well as phenolic acids from wheat debris. The resulting soil extracts were used directly in germination bioassays. A mixture of phenolic acids similar to that obtained from wheat-no-till soils did not affect germination of clover or morning glory and radicle and hypocotyl length of morning glory. The mixture did, however, reduce radicle and hypocotyl length of clover. Individual phenolic acids also did not inhibit germination, but did reduce radicle and hypocotyl length of both species. 6-MBOA (6-methoxy-2,3-benzoxazolinone), a conversion product of 2-o-glucosyl-7-methoxy-1,4-benzoxazin-3-one, a hydroxamic acid in living wheat plants, inhibited germination and radicle and hypocotyl length of clover and morning glory. 6-MBOA, however, was not detected in wheat debris, stubble, or soil extracts. Total phenolic acids (FC) in extracts were determined with Folin and Ciocalteu's phenol reagent. Levels of FC in wheat-conventional-till soil extracts were not related to germination or radicle and hypocotyl length of either species. Levels of FC in wheat-no-till soil extracts were also not related to germination of clover or morning glory, but were inversely related to radicle and hypocotyl length of clover and morning glory. FC values, solute potential, and acidity of wheat-no-till soil extracts appeared to be independent (additive) in action on clover radicle and hypocotyl length. Radicle and hypocotyl length of clover was inversely related to increasing FC and solute potential and directly related to decreasing acidity. Biological activity of extracts was determined best from slopes of radicle and hypocotyl length obtained from bioassays of extract dilutions. Thus, data derived from the water-autoclave extraction procedure, FC analysis, and slope analysis for extract activity in conjunction with data on extract pH and solute potential can be used to estimate allelopathic activity of wheat-no-till soils

CATEGORY: ECOLOGY; BIOCHEMISTRY & MOLECULAR BIOLOGY
SUPPLEMENTARY TERM: COVER CROPS; WHEAT; TRITICUM-AESTIVUM; SOYBEAN; GLYCINE-MAX; SOIL EXTRACTS; GERMINATION BIOASSAYS; PHENOLIC ACIDS; HYDROXAMIC ACIDS; ALLELOPATHY; SLOPE ANALYSIS; IVY-LEAVED MORNING GLORY; IPOMOEA-HEDERACEA; CRIMSON CLOVER; TRIFOLIUM-INCARNATUM
SUPPL. TERM PLUS: TRITICUM-AESTIVUM L; SECALE-CEREALE L; HYDROXAMIC ACID

Soil used instead of "residual plant material"
NO. GOOD

CONTENT; LEAF-AREA EXPANSION; PHENOLIC-ACIDS;
PLANT RESIDUES; FERULIC ACID; CUCUMBER;
 GROWTH; GERMINATION

REFERENCE(S):

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	ARN PG (RPG)	Referenced Work (RWK)
ANON	1988			SAS STAT USERS GUIDE
ARGANDONA, V H	1987	26	1917	PHYTOCHEMISTRY
BARNES, J P	1986		271	SCI ALLELOPATHY
BLUM, U	1984	10	1169	J CHEM ECOL
BLUM, U	1985	11	1567	J CHEM ECOL
BLUM, U	1989	15	2413	J CHEM ECOL
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BLUM, U	1988	20	793	SOIL BIOL BIOCHEM
BOX, J D	1983	17	511	WATER RES
BRADOW, J M	1991	17	2193	J CHEM ECOL
BROADBENT, F E	1962	27	459	SOILSCI SOC P
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CATALDO, D A	1974	14	854	CROP SCI
CHOU, C H	1976	2	369	J CHEM ECOL
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HOAGLAND, D R	1950			347 CAL AGR EXP STN
KIMBER, R W L	1973	38	543	PLANT SOIL
LANG, A R G	1967	20	2017	AUST J CHEM
LIEBL, R A	1983	9	1027	J CHEM ECOL
LYNCH, J M	1977	42	81	J APPL BACTERIOL
NAIR, M G	1990	16	353	J CHEM ECOL
NIEMEYER, H M	1989	28	447	PHYTOCHEMISTRY
PATRICK, Z A	1971	111	13	SOIL SCI
PEREZ, F J	1991	17	1037	J CHEM ECOL
RASMUSSEN, J A	1977	3	197	J CHEM ECOL
RICE, E L	1984			ALLELOPATHY
SHILLING, D G	1985	268	243	ACS SYM SER
SHILLING, D G	1986	34	633	J AGR FOOD CHEM
SHILLING, D G	1986	34	738	WEED SCI
STEUTER, A A	1981	67	64	PLANT PHYSIOL
TANG, C S	1978	4	225	J CHEM ECOL
TAUSSKY, H H	1953	202	675	J BIOL CHEM
WALLER, G R	1987	98	5	PLANT SOIL
WHITEHEAD, D C	1981	13	343	SOIL BIOL BIOCHEM
WILLARD, J I	1976	64	67	RESIDUE REV
WILLIAMS, R D	1982	30	206	WEED SCI
WORSHAM, A D	1989	9	275	ACADEMIA SINICA MONO
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WORSHAM, A D	1991	44	58	P SO WEED SCI SOC
ZUNIGA, G E	1983	22	2665	PHYTOCHEMISTRY

L104 ANSWER 15 OF 20

ACCESSION NUMBER:

DOC. NO. CPI:

TITLE:

WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN

2005-196090 [20] WPIDS

C2005-062210

Not good date

New autoclavable, heat stable, and microwavable isoenzyme of superoxide dismutase, extracted from leaves and rhizomes of *Curcuma longa*, for treating psoriasis, eczema, dermatitis, stroke, hemorrhage, and inflammation.

DERWENT CLASS:

A96 B04 B07 D13 D16 D21

INVENTOR(S): DIXIT, D; KOCHHAR, S; KOCHHAR, V K; PUSHPANGADAN, P; RAO, C V
 PATENT ASSIGNEE(S): (COUN-N) COUNCIL SCI & IND RES INDIA
 COUNTRY COUNT: 108
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
WO 2005017134	A2	20050224	(200520)*	EN	59	C12N009-02	
RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE							
LS LU MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW							
W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE							
DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG							
KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ							
OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG							
US UZ VC VN YU ZA ZM ZW							

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2005017134	A2	WO 2004-IN248	20040819

PRIORITY APPLN. INFO: IN 2003-DE1024 20030819

INT. PATENT CLASSIF.:

MAIN: C12N009-02

SECONDARY: C12N009-00

BASIC ABSTRACT:

WO2005017134 A UPAB: 20050608

NOVELTY - An **autoclavable** heat stable, and microwavable isoenzyme of superoxide dismutase (SOD) (I) present in crude extract as well as in purified form from leaves and rhizomes of *Curcuma longa*, is new.

DETAILED DESCRIPTION - An **autoclavable** heat stable, and microwavable isoenzyme of superoxide dismutase (SOD) (I) present in crude extract as well as in purified form from leaves and rhizomes of *Curcuma longa*, comprises:

(a) high O₂- scavenging activity of 30-40 units per mg (100%) protein before and 15-30 units per mg protein (50-70%) after **autoclaving** at 5-20 bars, 30min in leaves;

(b) O₂- scavenging activity in rhizome of 15-28 units per mg (100%) protein before and 5-10 units per mg protein (30-40%) after **autoclaving** at 5-20 bars, 30min;

(c) scavenging O₂- even when exposed to high temperature of 40-100 deg. C;

(d) contamination free and infection free from any living micro-and/or macro-organism after **autoclaving**;

(e) high O₂- scavenging activity remains high 30-40 units per mg (100%) protein before and 12-20 units per mg protein (40-50%) after exposing the leaf enzyme to microwave for 1-5 minutes;

(f) high O₂- scavenging activity between 5-28 units per mg (100%) protein before and 3-9 units per mg protein (20-30%) after exposing the rhizome enzyme to microwave for 1-5 minutes;

(g) that the isoenzyme is detected in intact leaves heated at 50-80 deg. C, **autoclaved** at 5-20 bars, 30min, or microwaved for 1-5 minutes;

(h) that the isoenzyme is 20-30 % more active in young 10-30 days old leaves than mature 31-150 days old leaves;

(i) that the isoenzyme is present in rhizomes (both young and mature)

but the activity being 40-50% lower as compared to the activity in leaves;

(j) that the crude extract of leaves exhibit higher detoxification of H₂O₂ because of 88 % higher peroxidase activity than the rhizome POD; and

(k) that the isoenzyme from leaves is a non-staining protein.

INDEPENDENT CLAIMS are also included for the following:

(1) a formulation (II) comprising the isoenzyme of SOD of (I), as an active ingredient;

(2) a formulation (III) comprising (I) together with a cosmetically acceptable peroxidase, cosmetically acceptable peroxidase substrate, hydrogen peroxide, ascorbate solvents, carriers and additives;

(3) a formulation (IV) comprising (I), in the form of a lotion, a serum, a liquid, semi liquid or milk emulsion, where the emulsion is obtained by dispersing a fatty phase in an aqueous phase of oil-in-water or water-in-oil or suspensions, cream emulsions, gel emulsions, microgranulates, or vesicular dispersions that are ionic or nonionic;

(4) a drug delivery system (V), comprising (I) and a polymer, and optionally comprising an antioxidant within the matrix of the polymer, where the matrix does not interact with the antioxidant;

(5) a toothpick (VI) having (I);

(6) a pharmaceutical composition (VII) comprising (I) and a carrier and optionally antimicrobials, antibiotics, antioxidants, anti-plaque agents, analgesics, anti-tartar agents, anti-carries agents, hemostatic agents, anti-inflammatory agents, anti-HIV agent, anti-cancer agent, a therapeutic agent for the treatment of neurovascular disorders, hormones, bleaching agents, vitamins, vaccines, caffeine and monoclonal antibodies;

(7) identifying (M1) (I) comprising localizing various isoenzymes of SOD in the crude extract of the leaf or rhizome of Curcuma on 7-12% native polyacrylamide gel, after electrophoresis, rinsing the gel with distilled water followed by incubation for 30 minutes in 2.5 mM nitro blue tetrazolium (NBT), immersing the gel for 17 times in 10⁻⁶ M riboflavin for 20 minutes and removing later onto a Petri plate to expose to a light intensity of 25-1000 nu Einstein/m²/second using a fluorescent light source to develop purple color throughout the gel except for the locations where SOD was localized, incubating with nitro blue tetrazolium and riboflavin, and exposing to light at room temperature, incubating the gel with continuous shaking on a gel rocker, and identifying the most prominent isoenzymes for the purpose of purification; and

(8) preparing (I).

ACTIVITY - Antipsoriatic; Dermatological; Cereboprotective; Vasotropic; Hemostatic; Antiinflammatory; Neuroprotective; Nootropic; Antimicrobial; Antibacterial; Analgesic; Anti-HIV; Cytostatic; Antiangiogenic; Anesthetic. Antibacterial property of antioxidant enzymes of Curcuma leaves and rhizomes was tested as follows. About 3.5 gm of L.B. Agar (Luria Broth Agar) per 100 ml of distilled water was used without the addition of antibiotic for the preparation of plates. DH5 alpha strain of Escherichia coli was used as bacterial strain. The disks of uniform size were cut from sterilized Whatmann 3 filter paper. SOD extracts from leaf and rhizome tissues were used for the test. The extract (5-10 micro l) was poured onto disks and were placed in the Petri dishes with the bacterial strain spread over it. The Petri dishes were then sealed and kept overnight at 37 deg. C in an incubator. The antibacterial activity was taken from the diameter of clear zone around the filter paper disks soaked in the purified enzyme. The percent activity is given in arbitrary units depending upon the diameter of the clear area. The antibacterial activity of the antioxidant enzymes of Curcuma leaves (L) and rhizomes (R), was found to be L=63, R=52, ampicillin (antibiotic control)=100.

MECHANISM OF ACTION - Vaccine.

USE - (II) Is useful for treating psoriasis, eczema, seborrheic dermatitis and related skin and scalp conditions (claimed). (I) Is useful for treating stroke, hemorrhage, inflammation, Alzheimer's disease,

ischemia, post-stroke injury.

ADVANTAGE - (I) Is autoclavable, heat stable, and microwavable. (I) Has free radicals scavenging property.

Dwg.0/5

FILE SEGMENT: . CPI
FIELD AVAILABILITY: AB; DCN
MANUAL CODES: CPI: A12-V01; B03-A; B03-C; B03-F; B03-H; B04-A06;
B04-A08; B04-A09A; B04-A09H; B04-A10; B04-B01B;
B04-B04D2; B04-C02; B04-C03; B04-G21; B04-J01;
B04-L01; B04-L03B; B04-L03D; B04-L05B; B04-L05C;
B04-N01; B04-N02; B04-N04; B05-A03A4; B05-B01D;
B05-B01P; B05-B02C; B05-C07; B05-C08; B06-A02;
B06-D17; B07-A02; B07-D13; B10-A07A; B10-A07B;
B10-A09B; B10-A17; B10-B02D; B10-B04A; B10-C02;
B10-C03; B10-C04D; B10-C04E; B10-E02; B10-E04;
B10-G02; B10-G03; B10-J02; B11-B; B11-C04A;
B11-C07B1; B11-C07B3; B11-C08D1; B11-C08E3;
B12-K04E; B14-A01; B14-A02; B14-A02B1; B14-A03;
B14-A04; B14-B02; B14-C01; B14-C03; B14-C07;
B14-F02D; B14-F02D1; B14-F02F2; B14-F08; B14-H01;
B14-J01A4; B14-N06A; B14-N16; B14-N17C; B14-R01;
B14-S08; B14-S11; D03-H01; D05-A01A2; D05-A01B;
D05-A01C1; D05-H07; D05-H09; D05-H11A; D05-H13;
D08-A05; D08-B; D08-B09A1

L104 ANSWER 16 OF 20 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
ACCESSION NUMBER: 2004-670051 [66] WPIDS
DOC. NO. CPI: C2004-239371
TITLE: Intramolecular transesterification of material,
especially plant extract, containing cyclic polyhydroxy
compounds, e.g. to prepare bioactive natural products,
carried out at elevated temperature and pressure.
DERWENT CLASS: B04 E19
PATENT ASSIGNEE(S): (ANOX-N) ANOXYMER GMBH
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
DE 10310267	A1	20040923	(200466)*		5	C07B041-12	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
DE 10310267	A1	DE 2003-10310267	20030310

PRIORITY APPLN. INFO: DE 2003-10310267 20030310

INT. PATENT CLASSIF.:

MAIN: C07B041-12
SECONDARY: C07B063-00; C07G003-00; C07G005-00; C07H001-06;
C07K001-14; C08B003-22

BASIC ABSTRACT:

DE 10310267 A UPAB: 20041015
NOVELTY - Intramolecular transesterification of starting materials containing cyclic polyhydroxy compounds (e.g. phenylethanoids) is carried out at a pressure of 1-20 x 10³ Pascals and a temperature of 40-250 deg. C, using an autoclave, sealed glass tube, distillation apparatus, extractor (e.g. Soxhlet) or perforator as apparatus.

ACTIVITY - Antiinflammatory.

MECHANISM OF ACTION - None given in the source material.

USE - The starting material is specifically a plant material or extract; and the process provides (after extraction and chromatography) pure compounds (e.g. isoacteoside (IAS)) or enriched fractions (all claimed). The process is specifically used in the recovery of biologically active natural products; and is especially applied to thermolabile esters of carbohydrate-containing natural products (i.e. mono-, di-, oligo- or polysaccharides or glycosides, e.g. flavonoid glycosides or saponins) with organic acids (e.g. acetic, caffeic or cinnamic acid) and/or inorganic acids (e.g. sulfuric or phosphoric acid). A preferred application is the conversion of acteoside (AS; a thermolabile caffeic acid-substituted disaccharide, contained in many plant materials and useful as a lead structure for antiinflammatory plant extracts) into IAS (having similar activity to AS, but present in plants in much smaller amounts). Other exemplified applications are the intramolecular transesterification of acylated flavonoids, saponins or **phenols** in plant **extracts**, sulfated polysaccharides (e.g. carrageenans) in algal extracts, sulfated glycosaminoglycans (e.g. heparin, chondroitin sulfate or keratan sulfate), nucleotides (e.g. adenosine monophosphate), chalcone sulfates or flavonoid sulfates, acylated cellulose or amylose derivatives (e.g. cellulose acetate or amylose acetate), cardiac glycosides (e.g. lanatosides), depsides in artichoke extracts, sulfated peptides or proteins (e.g. hirudin) and acylated iridoids and terpenes (e.g. harpagoside or devil's claw extract).

ADVANTAGE - The process may provide increased yields and/or allow the production of new compounds. In particular AS is converted into IAS (rather than being decomposed), allowing enrichment of IAS in plant extracts and isolation of IAS in crystalline form.

Dwg.0/0

FILE SEGMENT: CPI
FIELD AVAILABILITY: AB; DCN
MANUAL CODES: CPI: B01-D01; B04-A08C2; B04-A10; B04-B03B; B04-C02A1;
B04-C02D; B04-C02E1; B04-C02E2; B04-N02; B06-A01;
B06-A02; B07-A02B; B09-B; B10-C02; B10-C03; B14-C03;
E01; E05-G07; E06-A01; E06-A02D; E07-A02H; E10-C03;
E11-Q01

L104 ANSWER 17 OF 20 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
ACCESSION NUMBER: 2001-597260 [68] WPIDS
DOC. NO: CPI: C2001-176780
TITLE: Veterinary soft muscle stimulant consists of hypophysis
extract, preservative, **phenol** and water
with acidity control.
DERWENT CLASS: B04 C03
INVENTOR(S): RODRIGUES, H A
PATENT ASSIGNEE(S): (UZIN-N) UZINAS CHIMICAS BRASILEIRAS SA
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
BR 9906204	A	20010918	(200168)*		1	A61K035-12	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
BR 9906204	A	BR 1999-6204	19991210

PRIORITY APPLN. INFO: BR 1999-6204 19991210
 INT. PATENT CLASSIF.:

MAIN: A61K035-12

SECONDARY: A61P001-00; A61P015-00

BASIC ABSTRACT:

BR 9906204 A UPAB: 20011121

NOVELTY - The veterinary soft muscle stimulant comprises a specific hypophysis extract 1.00 ml and 10.00 ml of preservative (ascorbic acid) 0.10 g, phenol 0.05 g and sterilised double-distilled water 8.85 ml. Thus solutions of the extract and of the acid and the phenol are combined and brought to pH 5.0 by means of dilute NaCl. EMBODIMENT - Filtration in a Buchner funnel with a vacuum-filtration glass sheet and dispensing into 10ml neutral glass containers, is followed by autoclave-type sterilisation for 20 minutes at 120 degrees C.

USE - In pharmaceuticals.

Dwg. 0/0

FILE SEGMENT: CPI

FIELD AVAILABILITY: AB

MANUAL CODES: CPI: B04-B04E; B04-B04L; B10-E02; C04-B04E; C04-B04L; C10-E02

L104 ANSWER 18 OF 20 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN

ACCESSION NUMBER: 1986-179247 [28] WPIDS

DOC. NO. CPI: C1986-077201

TITLE: P-hydroxyphenyl derivs. production - by alkaline oxidative hydrolysis of coconut husk in presence of cobalt(III) hydroxide.

DERWENT CLASS: A41 B05 E14

PATENT ASSIGNEE(S): (AGEN) AGENCY OF IND SCI & TECHNOLOGY

COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
JP 61112035	A	19860530	(198628)*		4		
JP 62013333	B	19870325	(198715)				

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
JP 61112035	A	JP 1984-232875	19841105

PRIORITY APPLN. INFO: JP 1984-232875 19841105

INT. PATENT CLASSIF.: B01J023-74; C07C027-00; C07C045-27; C07C047-56; C07C049-82; C07C051-21; C07C065-03

BASIC ABSTRACT:

JP 61112035 A UPAB: 19930922

Phenol production by oxidative hydrolysis of coconut husk dust in presence of alkali and cobalt (III) catalyst.

Coconut husk contains about 40 weight% lignin, and is useful material to produce phenols. Dust (non-fibre) part of coconut husk is separated, and this is hydrolysed oxidatively in presence of cobalt (III) catalyst to liberate phenols, and phenols are extracted with

suitable solvent(s). Crushed coconut husk dust and 2N-, or 4N-NaOH or KOH are placed in autoclave, and heated to 130-165 deg.C under 3-10

kg/sq.cm oxygen pressure in presence of cobalt (III) hydroxide (20mmol/g lignin). Coconut husk may be extracted with benzene and ethanol to defatt,

prior to oxidative hydrolysis. Cobalt (III) hydroxide is prepared by oxidation of cobalt (II) sulphate with H₂O₂ in alkali medium. Mixture of p-hydroxybenzoic acid, p-hydroxyacetophenone, vanillin, p-hydroxybenzaldehyde etc. is obtd. as hydrolysis prod.

USE/ADVANTAGE - By oxidative hydrolysis of coconut husk, p-hydroxyphenyl derivs. can be produced cheaply and efficiently. p-Hydroxyphenyl derivs. are useful intermediates of high polymers, perfume(s), drug(s), or other chemicals.

0/0

FILE SEGMENT: CPI
FIELD AVAILABILITY: AB
MANUAL CODES: CPI: A01-E13; B10-E02; E10-E02; N02-B

L104 ANSWER 19 OF 20 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
ACCESSION NUMBER: 1982-11504E [06] WPIDS
TITLE: Purificn. of synthetic methanol - by filtering through cationite and then through crushed silicate brick.
DERWENT CLASS: E17 J01
INVENTOR(S): MEZHOV, V D; OLESHKO, F A; OLESHKO, P R
PATENT ASSIGNEE(S): (NCSY-R) NOVCH SYNTH PROD
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
SU 825482	B	19810430	(198206)*		5		

PRIORITY APPLN. INFO: SU 1977-2548956 19771201
INT. PATENT CLASSIF.: C07C029-74; C07C031-04
BASIC ABSTRACT:

SU 825482 B UPAB: 19930915

Synthetic methanol is purified by: passing it down a column of a cationite or cationite and anionite; and then passing it through a filter of crushed silicate bricks. The latter are obtd. by autoclaving a mixture of sand and lime and opt. clay, having a particle size of 5-20 mm. The methanol is filtered at a rate of 5-10 vols. per hr. at 10-40 deg.C. The method is simpler than prior methods.

Pref. the silicate brick is made by steam autoclaving a mixture of (in %): lime 6-8, clay up to 20-25 and sand the balance.

FILE SEGMENT: CPI
FIELD AVAILABILITY: AB
MANUAL CODES: CPI: E10-E04E; J01-D04

L104 ANSWER 20 OF 20 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
ACCESSION NUMBER: 1975-49852W [30] WPIDS
TITLE: Catalytic oxidn of waste waters - using copper oxide and one other oxide.
DERWENT CLASS: D15
PATENT ASSIGNEE(S): (KANF) KANEGAFUCHI CHEM KK
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
JP 49094157	A	19740906	(197530)*				

PRIORITY APPLN. INFO: JP 1973-6435 19730111
BASIC ABSTRACT:

JP 49094157 A UPAB: 19930831

In the catalytic oxidation of free O-containing gases of waste waters containing organic or inorg. materials, at 100-300 degrees under pressure, a catalyst system based on Cu oxide and 1 other oxide selected from Sn oxide, Ni oxide, Co oxide, Fe oxide, Ce oxide and ZnO or a system based on Ni oxide, and Co oxide is used. This process can be used to treat the supernatant liquid as well as the sludge from an activated-sludge treatment plant, effluent from the fermentation **plant**, cyanide-containing **wastes**, **phenol-containing wastes**, oil-containing wastes, sewage, and various other types of wastes. A catalysts (2.0%), obtd. by firing the ppte obtd. by adding NaOH to an HCl solution containing CuSO4 and SnCl2, was placed in the **autoclave**, the **autoclave** was pressurized to 5 kg/cm2 with air, and the **autoclave** was then heated rapidly to 200 degrees. In an example, the effluent (200 ml) (COD 1490 ppm) from the activated sludge treatment of the **waste waters** from a fermentation **plant**, was charged into Ti-lined, 500 ml **autoclave**. After stirring at 200 degrees for 1 hr, the **autoclave** was cooled with tap water. The filtrate following separation of the catalyst showed a 96% removal of COD.

FILE SEGMENT: CPI
FIELD AVAILABILITY: AB
MANUAL CODES: CPI: D04-B01; D04-B02

FILE 'HOME' ENTERED AT 15:07:37 ON 27 MAR 2006

=>

=> d his nofile

(FILE 'HOME' ENTERED AT 13:34:47 ON 27 MAR 2006)

FILE 'CAPLUS' ENTERED AT 13:34:58 ON 27 MAR 2006

SET LINE 250
SET DETAIL OFF
E US2004-801511/AP, PRN 25
SET NOTICE 1000 SEARCH
L1 1 SEA ABB=ON US2004-801511/AP
SET NOTICE LOGIN SEARCH
SET LINE LOGIN
SET DETAIL LOGIN
D SCAN

FILE 'REGISTRY' ENTERED AT 13:36:04 ON 27 MAR 2006

L2 1 SEA ABB=ON TYROSOL/CN
L3 1 SEA ABB=ON HYDROXYTYROSOL/CN

FILE 'REGISTRY' ENTERED AT 13:36:18 ON 27 MAR 2006

D IDE L2
D IDE L3

FILE 'CAPLUS' ENTERED AT 13:36:59 ON 27 MAR 2006

D IBIB L1
L4 1296 SEA ABB=ON L2
L5 698 SEA ABB=ON L3
L6 2 SEA ABB=ON BALLESTEROS PERDICES M?/AU
L7 3 SEA ABB=ON PERDICES M?/AU
L8 128 SEA ABB=ON BALLESTEROS M?/AU
L9 1569 SEA ABB=ON ALVAREZ M?/AU OR NEGRO ALVAREZ M?/AU OR NEGRO
M?/AU
L10 69 SEA ABB=ON MANZANARES SECADES P?/AU OR SECADES P?/AU OR
MANZANARES P?/AU
L11 29 SEA ABB=ON BALLESTEROS I?/AU OR BALLESTEROS PERDICES I?/AU OR
PERDICES I?/AU
L12 866 SEA ABB=ON OLIVA DOMINGUEZ J?/AU OR OLIVA J?/AU OR DOMINGUEZ
J?/AU
L13 12341 SEA ABB=ON OLIVE OIL/CT
L14 65522 SEA ABB=ON PHENOLS/CT
L15 921 SEA ABB=ON L14 (L) PUR/RL
L16 78 SEA ABB=ON (L4 OR L5) (L) PUR/RL
L17 11 SEA ABB=ON (L6 OR L7 OR L8) AND L9 AND L10 AND L11
L18 3 SEA ABB=ON L17 AND (L13 OR L14 OR (L4 OR L5))
L19 11 SEA ABB=ON (L6 OR L7 OR L8 OR L9 OR L10 OR L11) AND (L13 OR
L14 OR (L4 OR L5)),
D SCAN L1
L20 7899 SEA ABB=ON AUTOCLAV?/OBI
L21 38969 SEA ABB=ON HYDROTHERMAL?/OBI
L22 22944 SEA ABB=ON (PLANT#/OBI (L) (RESIDU?/OBI OR WASTE#/OBI))
L23 1 SEA ABB=ON (L13 OR L22) AND (L20 OR L21) AND (L15 OR L16)
L24 1 SEA ABB=ON (L13 OR L22) AND (L20 OR L21) AND ((L4 OR L5) OR
L14)
L25 2228 SEA ABB=ON ((L4 OR L5) OR L14) (L) EXTRACT?/OBI
L26 3 SEA ABB=ON L25 AND (L20 OR L21)
D SCAN
L27 1423 SEA ABB=ON (L20 OR L21) (L) (RESIDU?/OBI OR WASTE#/OBI)
L28 2 SEA ABB=ON L27 AND ((L4 OR L5) OR L14)

FILE 'STNGUIDE' ENTERED AT 14:22:46 ON 27 MAR 2006

FILE 'JICST-EPLUS, AGRICOLA, PASCAL, FROSTI, CABA, BIOTECHNO, BIOSIS, BIOTECHDS, FSTA, CONFSCI, CEABA-VTB, SCISEARCH' ENTERED AT 14:26:31 ON 27 MAR 2006

L29 120 SEA ABB=ON BALLESTEROS I?/AU OR BALLESTEROS PERDICES I?/AU OR PERDICES I?/AU
 L30 701 SEA ABB=ON BALLESTEROS M?/AU OR BALLESTEROS PERDICES M?/AU OR PERDICES M?/AU
 L31 7027 SEA ABB=ON ALVAREZ M?/AU OR NEGRO ALVAREZ M?/AU OR NEGRO M?/AU
 L32 327 SEA ABB=ON MANZANARES SECADES P?/AU OR SECADES P?/AU OR MANZANARES P?/AU
 L33 71147 SEA ABB=ON OLIVE#
 L34 274560 SEA ABB=ON PHENOL#
 L35 2028 SEA ABB=ON TYROSOL# OR HYDROXYTYROSOL#
 L36 30229 SEA ABB=ON AUTOCLAV?
 L37 71654 SEA ABB=ON HYDROTHERMAL? OR HYDRO THERMAL?
 L38 1320943 SEA ABB=ON RESIDU?
 L39 625929 SEA ABB=ON WASTE#
 L40 306 SEA ABB=ON L2
 L41 223 SEA ABB=ON L3
 L42 27 SEA ABB=ON (L29 OR L30 OR L31 OR L32) AND ((L34 OR L35) OR (L40 OR L41))
 L43 19 DUP REM L42 (8 DUPLICATES REMOVED)
 ANSWERS '1-2' FROM FILE AGRICOLA
 ANSWERS '3-6' FROM FILE PASCAL
 ANSWERS '7-8' FROM FILE FROSTI
 ANSWERS '9-10' FROM FILE CABA
 ANSWERS '11-13' FROM FILE BIOSIS
 ANSWERS '14-16' FROM FILE BIOTECHDS
 ANSWER '17' FROM FILE FSTA
 ANSWERS '18-19' FROM FILE SCISEARCH
 L44 9 SEA ABB=ON L42 AND ((L36 OR L37 OR L38 OR L39) OR L33)
 L45 6 SEA ABB=ON L29 AND L30 AND L31 AND L32 AND ((L34 OR L35) OR (L40 OR L41))
 L46 799 SEA ABB=ON ((L34 OR L35) OR (L40 OR L41)) AND (L36 OR L37)

FILE 'STNGUIDE' ENTERED AT 14:30:50 ON 27 MAR 2006

FILE 'JICST-EPLUS, AGRICOLA, PASCAL, FROSTI, CABA, BIOTECHNO, BIOSIS, BIOTECHDS, FSTA, CONFSCI, CEABA-VTB, SCISEARCH' ENTERED AT 14:35:46 ON 27 MAR 2006

L47 148 SEA ABB=ON L46 AND ((L38 OR L39) OR L33)
 L48 579 SEA ABB=ON (L36 OR L37) (5A) ((L38 OR L39))
 L49 15 SEA ABB=ON L48 AND ((L34 OR L35) OR (L40 OR L41))
 D SCAN
 L50 94 SEA ABB=ON ALPERUJO OR ALPEORUJO
 L51 28672 SEA ABB=ON (OLIVE# OR OLIVE OIL)/CT,ST
 L52 17 SEA ABB=ON L51 AND (L36 OR L37) AND ((L34 OR L35) OR (L40 OR L41))
 L53 40633 SEA ABB=ON PLANT#(3A) (L38 OR L39)
 L54 13 SEA ABB=ON L50 AND (L36 OR L37) AND ((L34 OR L35) OR (L40 OR L41))
 L55 2 SEA ABB=ON L53 AND (L36 OR L37) AND ((L34 OR L35) OR (L40 OR L41))
 L56 5 SEA ABB=ON (L40 OR L41) AND (L36 OR L37)
 L57 8642 SEA ABB=ON (L34 OR L35) (3A) EXTRACT?
 L58 36 SEA ABB=ON L57 AND (L36 OR L37)
 L59 7 SEA ABB=ON (L53 OR L33 OR L51 OR L50) AND L58

FILE 'WPIDS' ENTERED AT 14:44:15 ON 27 MAR 2006

L60 2 SEA ABB=ON MANZANARES SECADES P?/AU OR SECADES P?/AU OR
MANZANARES P?/AU
L61 102 SEA ABB=ON ALVAREZ M?/AU OR NEGRO ALVAREZ M?/AU OR NEGRO
M?/AU
L62 2 SEA ABB=ON BALLESTEROS M?/AU OR BALLESTEROS PERDICES M?/AU OR
PERDICES M
L63 2 SEA ABB=ON BALLESTEROS I?/AU OR BALLESTEROS PERDICES I?/AU OR
PERDICES I
L64 6039 SEA ABB=ON OLIVE#
L65 243054 SEA ABB=ON RESIDU?
L66 254301 SEA ABB=ON WASTE#
L67 3 SEA ABB=ON ALPERUJO OR ALPEORUJO
L68 99288 SEA ABB=ON PHENOL#
L69 58 SEA ABB=ON TYROSOL# OR HYDROXYTYROSOL#
L70 15477 SEA ABB=ON AUTOCLAV?
L71 5815 SEA ABB=ON HYDROTHERMAL? OR HYDRO THERMAL?
L72 1 SEA ABB=ON L61 AND (L60 OR (L62 OR L63))
L73 2 SEA ABB=ON (L60 OR L61 OR L62 OR L63) AND (L68 OR L69)
D TRIAL 1-2
E E14/DC

FILE 'STNGUIDE' ENTERED AT 14:47:42 ON 27 MAR 2006

FILE 'WPIDS' ENTERED AT 14:51:26 ON 27 MAR 2006

L74 311 SEA ABB=ON C07C029-74/IPC
L75 12049 SEA ABB=ON PLANT#(5A)((L65 OR L66))
L76 4 SEA ABB=ON (L75 OR L64 OR L67) AND L74
D TRIAL 1-4
L77 1 SEA ABB=ON (L75 OR L64 OR L67) AND L74 AND (L70 OR L71)
D TRIAL
L78 2 SEA ABB=ON L74 AND (L70 OR L71)
L79 4 SEA ABB=ON (L68 OR L69) AND (L70 OR L71) AND (L64 OR L75 OR
L67)
D TRIAL 1-4
D TRIAL L67 1-3
L80 1 SEA ABB=ON L69 AND (L70 OR L71)
L81 1255 SEA ABB=ON L68(3A)(EXTRACT? OR PURIF?)
L82 3 SEA ABB=ON (L70 OR L71) AND L81

FILE 'DISSABS' ENTERED AT 14:56:41 ON 27 MAR 2006

L83 0 SEA ABB=ON MANZANARES SECADES P?/AU OR SECADES P?/AU OR
MANZANARES P?/AU
L84 63 SEA ABB=ON ALVAREZ M?/AU OR NEGRO ALVAREZ M?/AU OR NEGRO
M?/AU
L85 3 SEA ABB=ON BALLESTEROS M?/AU OR BALLESTEROS PERDICES M?/AU OR
PERDICES M?/AU
L86 1 SEA ABB=ON BALLESTEROS I?/AU OR BALLESTEROS PERDICES I?/AU OR
PERDICES I?/AU
D SCAN
D SCAN L85
L87 2883 SEA ABB=ON PHENOL# OR TYROSOL# OR HYDROXYTYROSOL#
L88 0 SEA ABB=ON L84 AND L87

FILE 'STNGUIDE' ENTERED AT 14:58:00 ON 27 MAR 2006

FILE 'CAPLUS' ENTERED AT 14:59:08 ON 27 MAR 2006

D QUE L1
D QUE L19
L89 11 SEA ABB=ON L1 OR L19

FILE 'WPIDS' ENTERED AT 14:59:10 ON 27 MAR 2006

D QUE L72

D QUE L73

L90 2 SEA ABB=ON (L72 OR L73)

FILE 'JICST-EPLUS, AGRICOLA, PASCAL, FROSTI, CABA, BIOTECHNO, BIOSIS, BIOTECHDS, FSTA, CONFSCI, CEABA-VTB, SCISEARCH' ENTERED AT 14:59:13 ON 27 MAR 2006

D QUE L44

D QUE L45

L91 9 SEA ABB=ON (L44 OR L45)

FILE 'CAPLUS, AGRICOLA, PASCAL, FROSTI, BIOTECHNO, BIOSIS, FSTA, SCISEARCH, WPIDS' ENTERED AT 14:59:30 ON 27 MAR 2006

L92 14 DUP REM L89 L91 L90 (8 DUPLICATES REMOVED)

ANSWERS '1-11' FROM FILE CAPLUS

ANSWER '12' FROM FILE FROSTI

ANSWER '13' FROM FILE FSTA

ANSWER '14' FROM FILE WPIDS

D IBIB ED ABS HITIND 1-11

D IALL 12-14

FILE 'STNGUIDE' ENTERED AT 15:00:01 ON 27 MAR 2006

FILE 'CAPLUS' ENTERED AT 15:01:41 ON 27 MAR 2006

D QUE L24

D QUE L26

D QUE L28

L93 3 SEA ABB=ON (L24 OR L26 OR L28) NOT L89

FILE 'WPIDS' ENTERED AT 15:01:43 ON 27 MAR 2006

D QUE L78

D QUE L79

D QUE L80

D QUE L82

L94 6 SEA ABB=ON (L78 OR L79 OR L80 OR L82) NOT L91

FILE 'JICST-EPLUS, AGRICOLA, PASCAL, FROSTI, CABA, BIOTECHNO, BIOSIS, BIOTECHDS, FSTA, CONFSCI, CEABA-VTB, SCISEARCH' ENTERED AT 15:01:52 ON 27 MAR 2006

D QUE L49

D QUE L52

D QUE L53

D QUE L55

D QUE L56

D QUE L59

L95 40653 SEA ABB=ON (L49 OR L52 OR L53 OR L55 OR L56 OR L59) NOT L90

FILE 'STNGUIDE' ENTERED AT 15:02:24 ON 27 MAR 2006

FILE 'WPIDS' ENTERED AT 15:05:27 ON 27 MAR 2006

D QUE L78

D QUE L79

D QUE L80

D QUE L82

L96 6 SEA ABB=ON (L78 OR L79 OR L80 OR L82) NOT L90

FILE 'JICST-EPLUS, AGRICOLA, PASCAL, FROSTI, CABA, BIOTECHNO, BIOSIS, BIOTECHDS, FSTA, CONFSCI, CEABA-VTB, SCISEARCH' ENTERED AT 15:05:31 ON 27

MAR 2006

D QUE L49
D QUE L52
D QUE L54
D QUE L55
D QUE L56
D QUE L59
L97 14 SEA ABB=ON L49 NOT L91
L98 13 SEA ABB=ON L52 NOT L91
L99 13 SEA ABB=ON L54 NOT L91
L100 1 SEA ABB=ON L55 NOT L91
L101 3 SEA ABB=ON L56 NOT L91
L102 7 SEA ABB=ON L59 NOT L91
L103 24 SEA ABB=ON (L97 OR L98 OR L99 OR L100 OR L101 OR L102)

FILE 'CAPLUS, JICST-EPLUS, AGRICOLA, PASCAL, FROSTI, CABA, BIOSIS,
BIOTECHDS, FSTA, CEABA-VTB, SCISEARCH, WPIDS' ENTERED AT 15:07:09 ON 27
MAR 2006

L104 20 DUP REM L93 L103 L96 (13 DUPLICATES REMOVED)
ANSWERS '1-3' FROM FILE CAPLUS
ANSWER '4' FROM FILE JICST-EPLUS
ANSWERS '5-6' FROM FILE AGRICOLA
ANSWERS '7-9' FROM FILE PASCAL
ANSWERS '10-12' FROM FILE BIOTECHDS
ANSWERS '13-14' FROM FILE SCISEARCH
ANSWERS '15-20' FROM FILE WPIDS
D IBIB ED ABS HITIND 1-3
D IALL 4-20

FILE 'HOME' ENTERED AT 15:07:37 ON 27 MAR 2006

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